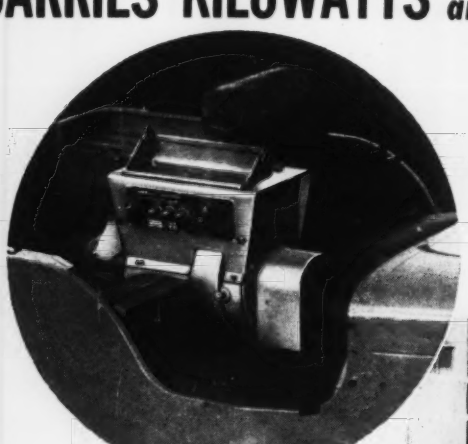
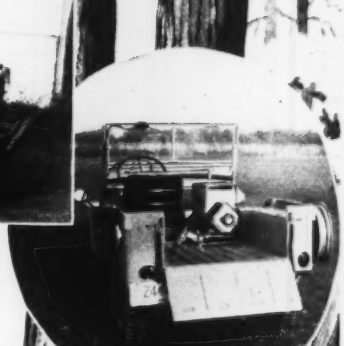
ENGINEERING NEWS-RECORD

Anderson Ranch Dam, world's highest earth-fill structure, rises in mountainous Idaho

Now THE VERSATILE JEEP CARRIES KILOWATTS *anywhere, anytime for:*

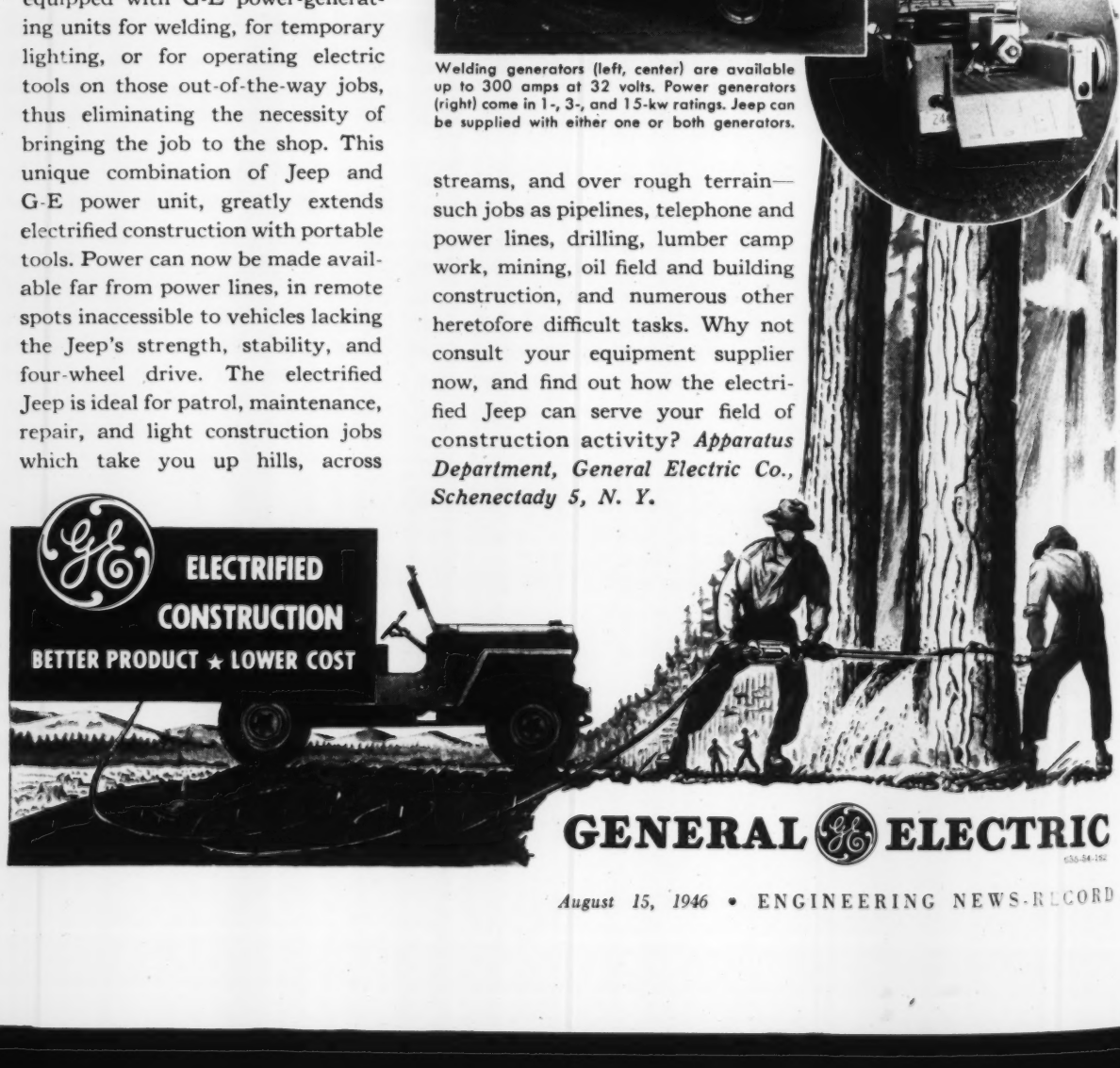
★WELDING
★LIGHTING
★POWERING drills, saws, hammers, and other electric tools





Welding generators (left, center) are available up to 300 amps at 32 volts. Power generators (right) come in 1-, 3-, and 15-kw ratings. Jeep can be supplied with either one or both generators.

● The universal Jeep can now be equipped with G-E power-generating units for welding, for temporary lighting, or for operating electric tools on those out-of-the-way jobs, thus eliminating the necessity of bringing the job to the shop. This unique combination of Jeep and G-E power unit, greatly extends electrified construction with portable tools. Power can now be made available far from power lines, in remote spots inaccessible to vehicles lacking the Jeep's strength, stability, and four-wheel drive. The electrified Jeep is ideal for patrol, maintenance, repair, and light construction jobs which take you up hills, across streams, and over rough terrain—such jobs as pipelines, telephone and power lines, drilling, lumber camp work, mining, oil field and building construction, and numerous other heretofore difficult tasks. Why not consult your equipment supplier now, and find out how the electrified Jeep can serve your field of construction activity? *Apparatus Department, General Electric Co., Schenectady 5, N. Y.*



GENERAL ELECTRIC

News of the Week

ENGINEERING NEWS-RECORD • AUGUST 15, 1946 • VOLUME 137 • NUMBER 7

Federal departments curtail budgeted construction work

Bureau of Reclamation, Army Engineers and Public Roads Administration adjust programs to meet orders of Reconversion Director under economy program

Construction programs of the principal federal agencies for the remainder of the fiscal year 1947 are being cut to conform to the order issued Aug. 5 by John R. Steelman, head of the Office of War Mobilization and Reconversion (*ENR* Aug. 8, vol. p. 147). That order called for a moratorium on all new federally financed work from Aug. 6 through Sept. 30, 1946, and required that no new work costing more than $3,000 should be started between Oct. 1, 1946 and March 31, 1947, without specific authorization from Mr. Steelman's office. Work already underway or work for which contracts had been let and that could start before Oct. 1, were not affected by the OWMR directive.

The directive also required each federal construction agency to review its construction program for the fiscal year 1947 to determine which projects cannot be deferred until the fourth quarter of the fiscal year 1947 (i.e., started on or after April 1, 1947). A list of such projects is to be submitted to the OWMR not later than Aug. 31 of this year. At the same time, each agency must submit to the OWMR a revised construction program for the entire fiscal year 1947. Under the revised program each agency must cut its work sufficiently to make an aggregate cut of $700,000,000 in the total federal construction program for the year, reducing it from $1,600,000,000 to $900,000,000.

Reclamation funds committed

A cut of this magnitude will require the Bureau of Reclamation to limit its expenditures to $85,000,000, or about the amount for which commitments already have been made. The bureau originally planned to spend $170,000,000. Practically all of the $85,000,000 will be required to meet progress payments on work already under contract.

Principal reclamation projects affected by the OWMR directive are Central Valley in California, the Columbia Basin project in Washington and work in the upper Missouri River valley.

The bureau also is cutting its budget for the 1948 fiscal year to conform to a retrenchment program laid down by President Truman in a letter to the heads of federal spending agencies issued sometime before the OWMR directive. This amount is very much less than the bureau had planned to spend in that year.

Army civil work cut

The Army Engineers have been instructed to limit their 1947 civil works program to $185,000,000, of which $95,000,000 is for flood control and $90,000,000 for river and harbor work. This compares with $309,000,000 that was appropriated for the current fiscal year.

For the fiscal year 1948 the army work is to be limited to $205,000,000 by the President's letter, of which $110,000,000 is for flood control and $95,000,000 for river and harbor work. Only $25,000,000 can be spent each year on *new* river and harbor projects.

(*Continued on page* 7)

Allot $30 million for state airports

Apportionments to the states of $30,822,750 of a $45,000,000 appropriation by Congress for airport construction and development during the fiscal year 1947 were announced last week by the Civil Aeronautics Administration.

Charles B. Donaldson, Assistant Administrator for Airports (*ENR* June 20, vol. p. 954) said that the apportionments were made under the federal airport act. Federal costs, which must be matched by sponsors of projects, were determined by the ratio which the population and area of the state bear to the total population and area of the United States. This formula is provided by the act.

Out of the $45,000,000 appropriation by Congress $1,740,000 is for projects in Alaska, Hawaii and Puerto Rico, leaving a total of $43,260,000 for projects in the United States. Of that sum, 5 percent is for administration, and 25 percent of the remainder is set aside as a discretionary fund to be available for construction as determined by the Administrator of Civil Aeronautics. Total money available for allocation among the states, therefore, is $30,822,750.

Regulations governing individual project requests are now being prepared, and applications from project sponsors will be considered after Oct. 1, Mr. Donaldson said.

State funds listed

Total apportionments to the states, both on the basis of ratio to total population and to total land and water areas are:

Alabama, $591,213; Arizona, $625,320; Arkansas, $492,437; California, $1,598,582; Colorado, $650,276; Connecticut, $227,839; Delaware, $43,172; District of Columbia, $77,955; Florida, $522,151; Georgia, $658,863.

Idaho, $477,266; Illinois, $1,212,617; Indiana, $582,951; Iowa, $577,179; Kansas, $620,260; Kentucky, $534,101; Louisiana, $523,220; Maine, $269,947; Maryland, $274,397; Massachusetts, $551,120.

Michigan, $1,096,900; Minnesota, $796,211; Mississippi, $495,837; Missouri, $789,721; Montana, $797,733; Nebraska, $538,393; Nevada, $563,019; New Hampshire, $103,834; New Jersey, $527,839; New Mexico, $667,735.

New York, $1,846,180; North Carolina, $680,372; North Dakota, $426,800; Ohio, $1,030,860; Oklahoma, $621,430; Oregon, $610,420; Pennsylvania, $1,388,042; Rhode Island, $89,605; South Carolina, $377,601; South Dakota, $458,690.

Tennessee, $551,531; Texas, $2,081,311; Utah, $487,007; Vermont, $89,867; Virginia, $524,064; Washington, $554,509; West Virginia, $342,959; Wisconsin, $696,774, and Wyoming, $516,629.

NEWS IN BRIEF

In telegraphic form, here are latest news developments on the engineering and construction front during the week.

Highways—*Arkansas* will be able to spend $60,825,000 on her highways during the next five years, according to an analysis of state funds. The total includes $22,545,000 expected from the federal government. . . . *Washington* State has a backlog of $149,000,000 worth of needed projects—$17,000,000 of them in the Columbia Basin. . . . *East St. Louis, Ill.*, plans a $2,400,000 street improvement program. . . . More than $4,500,000 in highway construction contracts have been awarded by *Mississippi*. . . . Despite delays caused by material and manpower shortages, *Oregon* has awarded about $9,000,000 in road contracts this year. . . . *Wisconsin* will resume its program of roadside improvements, curtailed by the war. . . . *California* is now in a position to begin asking bids on a $46,000,000 program for 1947. . . . Lack of cooperation on the part of landowners is blamed for delay in awarding $15,000,000 worth of new contracts in *Louisiana*. . . . *Texas* is letting highway contracts at the rate of about $5,000,000 per month.

Construction — Construction started late in July on a 2-story-and-basement building costing $400,000 to house a *Kansas City, Mo.*, printing firm. . . . The Coca-Cola Bottling Co., *Tulsa, Okla.*, plans a $500,000 plant there. . . . Plans are now being prepared for a $10,000,000, 20-story, concrete and steel hotel building for downtown *Dallas, Texas*. . . . The West Virginia Pulp and Paper Co. plans a $3,000,000 mill at *Charleston, S. C.*. . . . Ground was broken July 28 for an $18,000,000, 14-story building for the New England Telephone and Telegraph Co., on a square block in downtown *Boston, Mass.* . . . Schenley Distilleries, Inc., will build a $1,000,000 plant at *Phoenix, Ariz.*, work to start about Sept. 1.

Bond Issues—*Nashville, Tenn.*, voters defeated a proposal for issuance of $4,000,000 in bonds to finance construction of a municipal auditorium. . . . Voters of *Edgar County, Ill.*, defeated a proposed $952,000 road bond issue. . . . *Adams County (Natchez) Miss.*, will vote on a $750,000 highway paving bond issue.

Waterworks, Sewerage—The municipal water division of *Seattle, Wash.*, plans to construct a $525,000 pumping plant during 1947. . . . The *Honolulu, T. H.*, board of water supply has authorized issuance of $1,000,000 in revenue bonds to finance necessary improvements to the city's water system. . . . The rural water system of *Wyandotte County (Kansas City) Kansas* will be extended through Prairie Township and into *Leavenworth County*, at a cost of $600,000, according to plans submitted to the Federal Works Agency. . . . Voters at *Prineville, Ore.*, have authorized a $136,000 bond issue to finance construction of a sewer system.

Housing—A 308-acre site, to be known as Whitemarsh Village, will be location of 1,000 new homes, to cost $10,000,000 on the outskirts of *Philadelphia, Pa.* . . . *Oklahoma* builders will attend a series of meetings called by the Federal Housing Administration to explain regulations governing issuance of priorities and other assistance for home construction.

Miscellany—The *Washington* State Development Board has released $5,071,000 to state institutions of higher learning for construction of additional class-rooms and housing. . . . Several *Boston, Mass.*, civic organizations have announced they will seek an injunction to halt construction of an underground parking lot under Boston Common. . . . Engineers for the E. I. DuPont de Nemours & Co. last week started core drilling for foundation studies at the site of a proposed $25,000,000 nylon manufacturing plant near *Chattanooga, Tenn.* . . . The *Montana* Postwar Planning and Construction Commission has drawn up a final report recommending expenditures of $4,260,361 for construction at state institutions and for reclamation. . . . The award of contracts for the installation of two 30-ton gantry cranes at the San Joaquin Valley and Friant-Kern Canal outlets of the Friant Dam was announced July 18 by the *Sacramento* office of the United States Bureau of Reclamation. Each of the cranes will be a 3-motor, outdoor type traveling on overhead rails. They will be used in installing and maintaining the hollow jet valves at the dam outlets. . . . *St. Louis, Mo.* voters approved a $4,000,000 issue for garbage incinerators.

Grant premium for cast-iron soil pipe production

Production of cast-iron soil pipe—one of the most critically short of all building materials—is expected by government officials to rise sharply as a result of premium payments regulation No. 8, issued Aug. 7.

Officials of the National Housing Agency said that the plan, together with recent increases in allocations of pig iron to the industry, is designed to expand production of soil pipe, fittings and accessories. The regulation is effective as of Aug. 1, and will continue in operation through June 30, 1947.

Generally, the premiums amount to $40 per ton on all Saturday production in excess of quota, provided that Saturday is the sixth day worked during the week, and $10 per ton for all other production in excess of quota. Monthly quotas, to be established for each individual plant, will be the higher of the following figures: (1) average monthly production of the latest three full operating months during the period January through May, 1946; or (2) 90 percent of the highest month's production during the same period.

High tides blamed for Philadelphia pier failure

Abnormally high tides are believed to have contributed to the collapse June 28 of pier 72, on the Delaware River at Philadelphia, Pa. Five men were killed in the accident.

Cheston Bryant, civil engineer of the Philadelphia Department of Public Works, at an inquiry hearing before Edwin R. Cox, director of the Philadelphia Department of Wharves, Docks and Ferries, explained that between May 27 and June 28 there had been 61 unusually high tides, ranging from one-tenth of a foot to three and one-half feet above normal. These, he believes, may have weakened the piles supporting the pier.

Bryant said that the section of the pier farthest out in the Delaware River is washed by currents so strong that at times a boat cannot be rowed against them. Representatives of a private pier maintenance firm said that maintenance of the pier had been above average. This was supported by the owners' records.

No attempt was made to decide definitely the cause of the tragedy pending accumulation of further data.

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Plan $195 million private water project

Plans for a $195,502,298 private water supply and power project in the Upper Delaware River between Easton, Pa., and Port Jervis, N. Y., were submitted last week to the New Jersey Division of Water Policy and Supply by the Electric Power Co. of New Jersey, of Trenton.

Hugo A. Spalinski, president of the company, said a similar application will be filed shortly with the Pennsylvania Board of Water Supply and Conservation at Harrisburg.

Main purpose of the project, according to the application, is to supply 500,000,000 gal. of water daily to the city of Philadelphia, and 150,000,000 gal. daily to communities in New Jersey. Later, according to the plan, the New Jersey allotment would be increased to 250,000,000 gal. daily.

Three dams planned

The Delaware River waters would be impounded above Easton by the construction of three dams. Plans call for a 58-mi. conduit from Tocks Island—one mile above Shawnee, Pa.—to a reservoir to be constructed at Warrington, Pa. This conduit, which would be 16 ft. in diameter, would be built underground through the Delaware Water Gap, and under the Lehigh River at Easton.

One dam would be built two miles above Easton; another a mile above a highway bridge across the Delaware at Belvidere, and a third a mile above Shawnee-on-Delaware, Pa.

An application for a permit to build the project was filed with the Federal Power Commision in 1942, but another application was re-filed last May 9.

The Ambursen Engineering Corp. of New York City has acted as consulting engineer for the project.

The Electric Power Co. said it hopes to sell the impounded water at a price of $135 per million gallons delivered to Warrington Reservoir. Power to be generated at the three dams is estimated at 689,211,000 kwh. annually. Arrangements have already been completed, Mr. Spalinski said, to dispose of the power at wholesale rates to existing utility companies.

St. Louis weighs own power for water system

The City of St. Louis, Mo., could save about $70,000 a year by constructing its own electric power plant in connection with a proposed $18,240,000 water system modernization program, according to a report submitted last week.

The city is planning a 5 to 8 year program, proposed last May, (*ENR* May 2, Vol. p. 691) that would include improvement of distribution facilities to increase the daily output by about 20,000,000 gal., modernization of the present Chain of Rocks water works plant on the Mississippi River and other work.

Electric power to drive pumps

The report, submitted to the Citizens Bond Issue Supervisory Committee, was made by the consulting engineering firm of Horner & Shifrin of St. Louis. The electric power, whether provided by private companies or by the city's own plant, would be used to drive pumps at the Chain of Rocks plant, which now uses steam-driven pumps. The Bond Issue Supervisory Committee exercises supervisory control of the expenditure of funds under a $43,000,000 issue for various public improvements, approved by city voters in 1944.

The Union Electric Co. was expected to submit a report disputing the claims for savings arising out of the operation of a municipal power plant for the water works system.

Vote $55 million bond issue for Houston, Texas

Providing financing for a major public construction program that will include highway work, sewers, incinerators, a civic center and other projects, voters at Houston, Tex., recently approved a $55,225,000 municipal bond issue.

With this approval, the city government said it now has available a total of $77,000,000 with which to finance a wide variety of municipal improvement.

The city's population, on a sharp upgrade for many years, is now about 475,000 within the city limits, as compared to 384,514 in 1940. Recent estimates placed the population of the metropolitan area in Harris County, at a total of 679,333.

The 21 bond issues approved by voters at an election July 27, include provisions for basic needs as sanitary sewers, storm sewers, street and bridge improvements, incinerators, a civic center, flood control, a hospital, and other municipal buildings. Also included was $6,000,000 for the improvement of the municipal airport.

To finance the program, the assessment base for the city's property taxes will be raised from 50 percent of actual value to 60 percent, with the present tax rate of $1.97½ per $100 remaining the same.

***Going Up**—The earth embankment that makes up Anderson Ranch Dam on the Boise River in central Idaho is rising rapidly towards its eventual height of 456 ft., and with it, costs of the project have risen—to an estimated $25,000,000 from the original $13,000,000 when the project was started in 1941. Built to a height of 300 ft. when work was halted by the war in 1943 the dam is now being raised 156 ft. to impound 500,000 ac. ft. of water by the summer of 1948. (ENR Oct. 25, 1945, vol. p. 551). R. J. Newell, Boise regional director for the Bureau of Reclamation, said that to date $18,000,000 had been spent on the project, and another $7,000,000 might be required to bring the structure to completion.*

DEVELOPMENTS BEYOND U. S. BORDERS

Digested from reports by Engineering News-Record correspondents and the McGraw-Hill World News Bureau

Egypt seeks bids on $40 million power station for Aswan Dam—French plan $6 billion electrification of railways—Brazil gives highest honor to American engineer—Reopen Port of Dunkirk

Egypt—A six man Hydro-Electric Power Commission representing Egypt is now in the United States, to seek bids on a $40,000,000 power station to be built at the great Aswan Dam, 500 miles south of Cairo, and make a tour of U. S. power installations.

The installation—planned for completion in four years—would be the largest hydro-electric development in Africa, and the first major power development in Egypt. It will be the forerunner of several other schemes for producing power now under consideration by the Egyptian governmnet. Built in 1902, Aswan Dam has thus far provided water for irrigation only.

The British consulting engineering firm of Kennedy and Donkin is assisting members of the commission in preparing plans for the project. Chief of the commission is Abdel Aziz Bey Ahmed, chairman, who is also director of the Hydro-Electric Power Department of Egypt.

The present call for bids—circulated in Switzerland, England and Sweden as well as the United States, calls for supplying and erection of the machinery and plant only. Separate bids will be asked for excavation and erection of appurtenant works. Bids will be opened at Cairo October 31. Copies of the proposal are available at the Egyptian Legation in Washington, D. C.

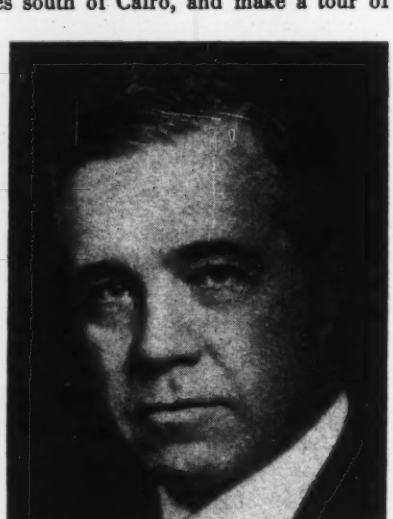
The entire cost of the project—which is expected to provide power for new industries in Egypt—will be paid by the Egyptian government from its own funds.

Since there is no immediate use for power at the Aswan damsite, the commission said it was also contemplating means of transporting the energy nearly 500 miles to the Cairo area.

France—The French National Railways have drawn up a ten-year plan to electrify an additional 1,300 miles of the country's rail network at a total cost of between $5 and $6 billion.

The prospect of relieving the French railroads of their dependence on outside coal supplies—currently one of the worst blocks to European economy—and the belief that electric locomotives are more economic to operate, is the principal reason for the plan, government sources indicate.

Some 2,100 miles of French railways are already electrified, as a part of a continuing program inaugurated before the late war. First work in the new program will be concentrated on three important lines: From Paris to Lyons; from Bordeaux to Montauban, and from Sete to Nimes.



A. W. K. Billings
honored by Brazilian government

Puerto Rico—The Water Resources Authority of Puerto Rico has announced plans to invest $4,500,000 for development of a huge hydro-electric project in the Luquillo National Forest.

The project would provide additional drinking water supplies to San Juan, and a new source of electric power for the island's industries.

Honors . . . . .

Brazil—An unusual honor was paid by the Brazilian government to a North American civil engineer a few weeks ago when A. W. K. Billings was decorated with the National Order of the Southern Cross. This is Brazil's highest non-military decoration, and it was awarded to Mr. Billings in recognition of his development of hydro-electric resources in the Sao Paulo-Rio de Janeiro area.

President of the Brazilian Traction, Light & Power Co., Ltd., a Canadian company, Mr. Billings first went to Brazil in 1922 as construction manager. Subsequently he advanced to vice-president in charge of all engineering and construction, and in 1944 assumed the presidency. The company has invested more than $350 million in the development of utility services, providing light and power, telephone, gas and traction services.

Notable among Mr. Billings' achievements was the bold scheme for damming up and reversing the flow of streams in the Sao Paulo area to take advantage of a 2,000-ft. drop from the mountainous plateau to the coastal plain. In addition to providing very cheap power, which has had a profound effect on industrialization, flood control benefits have also been realized.

A graduate of Harvard University in 1895, Mr. Billings has devoted most of his career to electric railway and hydro-electric work. He spent ten years in Cuba and five years in Spain prior to World War I. During that war he held rank of commander and was in charge of naval aviation construction in Europe; he was awarded the Navy Cross and the Legion of Honor for this work.

Ports and Harbors . . . .

France—The official reopening of the war-devastated port of Dunkirk was celebrated August 8—although the port facilities are still far from prewar condition.

German army units "holed in" at Dunkirk—as at several other French port cities—and held on until the last days of the war. When they left, the piers were unusable, the repair docks wrecked, and the locks were obstructed with sunken hulls.

But by Aug. 8, the New Lock and the Guillain Lock were back in service, and four piers were in usable condition.

At the other end of France, too, reconstruction of the Port of Marseilles is proceeding fast—the latest step being the reconditioning of the 22,000 metric ton south silo, capable of storing 2,000 tons of grain per day. Since the first of this year, more than $7,000,000 has been spent on reconstructing this port.

Puerto Rico—The War Department has announced it will spend $120,000 in

1946 to improve port facilities at San Juan, and Mayaguez.

Australia—The State of South Australia has announced it is considering plans for a new deep sea port at Robe—about 300 miles from Adelaide, to cost, with rail connections, some $4,000,000.

Housing . . . .

Chile—The Chilean Housing Authority (Caja de la Habitacion Popular) has announced it will erect 8,000 prefabricated houses per year under the direction of Abraham Alcaino, vice-president, who has just completed a study of prefabricated housing in the United States.

On returning from his U. S. tour, Alcaino said that the Chilean government would erect two plants—one at Temuco in the heart of the lumber region, and the other at Santiago—for production of prefabs. Each plant will be able to manufacture parts for 4,000 houses yearly. The houses will sell for between $700 and $1,000 per unit, without the land.

Norway—A housing program in Oslo—Norway's capital—has proceeded so successfully that 1,000 permanent three-and-four-room apartments will be ready for occupancy by early fall, officials say. With the continued delivery of building materials, and additional 1,000 will be completed by year's end, resulting in a total of 3,000 new apartments for Oslo and vicinity by early summer.

Puerto Rico—The Island's government will invest more than $1,750,000 for the development of low-rent housing projects, under authority of an act of the Special Legislative Session held during July. The projects planned will be in Ponce, Mayaguez and San Juan.

England—The International Federation for Housing and Town Planning will hold an exhibition of standards, sizes and types for housing, and models of redevelopment of towns, at Hastings from Oct. 7 to 12. Object of the exhibition and tours is to show what British Industry can and has produced to relieve the nation's acute housing shortage.

Town Planning . . . .

England—The cost of a "new town" such as the Engish government is planning at Crawley and Stevenage (*ENR* August 1, vol. p. 134, and June 6, vol. p. 882) will be between $108,000,000 and $144,000,000—of which nearly half would be spent on new housing, according to a final report of the government's New Towns Committee.

Outlining the final plans for the redevelopment of suburban areas into self-sufficient, well organized communities, the committee said that a full-scale development and building of a "new town" to house 30,000 to 50.000 persons, would take perhaps 20 years. The report recommended the establishment of new towns on relatively undeveloped sites, rather than extensions of existing communities.

Other suggestions included:

Stores should be limited to one to each 100 to 150 persons; central heating for a domestic area with a population density of 10 houses per acre should be "given a full-scale test"; roads should include radial roads from the town's center to a "ring" road around the main business district; railroad stations should be situated near the business district; and facilities to provide for airplane fields.

Russia—During the war, 1,710 Russian communities were either totally or partially wrecked, providing—despite the hardship to residents—an opportunity for planning engineers to rebuild the towns in a more efficient manner, according to speakers at a conference on town planning held at Moscow recently. Engineers and community officials attended to hear details of the government's current five-year plan for housing. V. Makarov, minister of municipal economy, told conferees that they must draw on "the best thinking in town reconstruction" as they attempt to meet the government's schedule which calls for a rate of home-building double that of the third Five-Year Plan (1938-1942).

In addition to the complete restoration of all public utilities in the war-damaged towns, a large number of new enterprises are to be built in the next five years. More than 1,000 miles of gas mains are to be put down in Moscow, Leningrad, Riga, Talinn and in the Donets Basin, to bring gas service to more than a million homes.

Somewhat typical of reconstruction programs is a highway program for Moscow, which will include a circumferential motor highway that will ring the city completely. In Moscow, too, several major new housing developments are planned in outlying areas.

Miscellany . . . .

Chile—A new cement plant, with an annual capacity of 100,000 tons, is to be built at Polpaico by Gildermeister and Co.—one of Chile's largest importing agencies.

China—More than 4,000 items of engineering literature from the library of the late John Ripley Freeman—civil engineer who served for several years as consultant to the Chinese Government—are now enroute to Nanking for placement in the library of the National Resources Commission of China.

***For Tourist Trade**—To relieve its current shortage of first-class accommodations for visitors—a shortage that threatens the city's lucrative tourist business—Mexico is pushing construction of hotels wherever possible. Newest hostelry planned is the $4,300,000 Hotel Del Prado, now nearing completion in Mexico City's downtown area. Featuring a half-dozen "Presidential Suites" for visiting dignitaries, the hotel will also provide 600 air-conditioned rooms, and a garage with accommodations for some 300 automobiles.*

Congress approved major engineering bills before closing historic session

Summary of principal actions by national legislators shows huge appropriations for projects, failure to enact valley authority, pollution, St. Lawrence, science foundation bills

Grinding through one of the biggest calendars in its history as its members grappled with problems of conversion from wartime to peacetime conditions, Congress during the session just ended passed a long list of engineering bills, including many of record scope.

Of greatest importance are the many new laws making appropriations for construction, although, in the light of the President's recent order calling for economy in the federal establishment, (see P. 1 of this issue) it is as yet uncertain just how much of this work will be carried forward at the present time.

The various appropriation bills enacted, plus an *ENR* reference indicating previous reports giving much detail, are as follows:

Public Law 341 (H.J. Res. 328) appropriates $253,727,000 for reuse of temporary war housing for veterans. Passage of this bill followed enactment Dec. 28, 1945, of H. R. 4805 (Law 269) which provided $197,000,000 for the same work.

Law 374 (H.R. 5400) War Department Civil Functions bill, provides $228,505,000 for construction and planning by the Army Engineers (April 25, vol. p. 681).

Law 384 (H.R. 5890) designated the second deficiency bill, this measure provides a total of $3,107,000 for construction and planning, broken down as follows: $1,342,000 for the Civil Aeronautics Administration for extending the National Airport at Washington, D. C., $865,000 for the Army Engineers for rivers and harbors, $400,000 for the Interior Department for roads on Indian reservations, and $500,000 for water supply and sewer work in the District of Columbia.

Law 388 (H.R. 4761) is the Patman Housing law, which, although not strictly an appropriation measure, permits the National Housing Agency to obtain $400,000,000 from the Reconstruction Finance Corporation for use as subsidies and other purposes to increase supply of housing materials, including $15,000,000 for construction of access roads (May 16, vol. p. 766, and May 30, vol. p. 833).

Law 419 (H.R. 6601) provides $441,250,000 for construction of hospitals by Veterans Administration June 20, vol. p. 957). Also supplies $35,000,000 for Bureau of Community Facilities of FWA to aid local public works planning groups (July 11, vol. p. 20).

Law 422 (H.R. 5605) General appropriation bill for the Department of Agriculture for fiscal year 1947. Provides $26,214,222 for construction and planning of forest roads, trails and highways, $2,100,000 for flood control, and $1,750,000 for water storage development and utilization.

Interior appropriations

Law 478 (H.R. 6335) Interior Department appropriations bill for fiscal 1947 making available $158,199,508 for engineering and construction work, including $108,563,898 for the Bureau of Reclamation; $18,330,000, National Park Service; $8,470,000, Bonneville Power Administration; $7,647,838, Bureau of Indian Affairs; $7,000,500, Southwestern Power Administration; $5,498,672, Geological Survey, and $2,189,100 for the Territory of Alaska (July 11, vol. p. 23).

Law 490 (H.R. 6056) supplies the Civil Aeronautics Administration with $45,000,000 to start a 7-year airport construction program to cost $1 billion (July 18, vol. p. 76). This bill also supplies $9,350,000 for the International Boundary and Water Commission to begin construction in accordance with the Mexican water treaty and including the building of three large dams on the Rio Grande between Laredo and Roma, Texas (May 23, vol. p. 823, and July 18, vol. p. 75).

Law 492 (H.R. 6496) appropriates $70,966,300 for the Bureau of Yards and Docks for construction within the U. S. and $132,260,000 for maintenance and repair and construction work outside the country (July 11, vol. p. 19).

Law 493 (H.R. 5990) General appropriation bill for the District of Columbia for fiscal year 1947 and contains $12,440,180 for engineering and construction. This money is earmarked as follows: Highways, $4,615,000; water department, $2,595,000; school construction, $2,297,680; sewer division, $1,900,000; city refuse, $422,000; and for other work, including repair of city jail and District training school $610,500.

Law 515 (H.R. 6837) War Department appropriation measure for fiscal 1947 and contains $816,044,000 for the U. S. Army Engineers, including $375,544,000 for engineering services $115,500,000 for work at military posts on the mainland, and $325,000,000 for construction and maintenance of Army barracks and other types of quarters (July 18, vol. p. 79).

Law 519 (H.R. 6777) permits the Tennessee Valley Authority to go ahead with construction of Watauga and Holston Dams and provides a total of $39,900,000 for the TVA (Aug. 1, vol. p. 145).

Law 521 (H.R. 6885) supplies $75,000,000 for the Bureau of Community Facilities of the Federal Works Agency for construction of additional facilities other than housing at educational institutions where veterans are receiving training. Also contains $471,918,000 for rehabilitation work in the Philippines, $5,300,000 for construction work by the Army Engineers, and $2,184,740 for construction by the Bureau of Reclamation.

Law 549 (H.R. 6739) supplies funds for the U. S. Public Health Service for fiscal 1947 and contains $259,043 for surveys and engineering studies relating to health and sanitation needs of the nation. The law will permit the water supply and sewerage needs survey described in *ENR* June 20, vol. p. 949, and the hospital needs survey outlined July 25, vol. p. 90, to be continued. This law also appropriates $1,377,920 for construction of buildings at Howard University in Washington, D. C.

Large authorization bills

Authorization bills of record size were also enacted. These laws, all of which contain no money, include:

Law 377 (S. 2) authorizes an appropriation of $500,000,000 for a 7-year airport construction program with the federal aid matched on a 50-50 basis by local sponsoring agencies (May 16, vol. p. 763).

Laws 388 and 336 (H.R. 4761 and S. 1821) which together permit appropriation of $441,000,000 for reuse of 200,000 temporary war housing units, this money later being appropriated (March 14, vol. p. 383).

Law 516 (H.R. 541) permits the District of Columbia to construct twin bridges across the Potomac River at a cost of $7,000,000, the money already being available (July 18, vol. p. 75).

Law 525 (H.R. 6407) authorizes $520,395,070 of rivers and harbors construction by the Corps of Engineers (June 27, vol. p. 966).

Law 526 (H.R. 6597) flood control bill, authorizing $772,000,000 of construction by the Corps of Engineers, $150,000,000 of work in the Missouri River Basin by the Interior Department, and $25,000,000 for watershed improvements by the Department of Agriculture (July 18, vol. p. 79).

Law 592 (S. 1426) establishes the District of Columbia Redevelopment Land Agency and a slum-clearance policy for Washington, and authorizes an appropriation of $20,000,000 for a 10-year construction program.

Law 648 (S. 223) authorizes but appropriates no money for a $25,000,000 six-year medical facilities construction program for the District of Columbia, including a medical center to cost between $15,000,000 and $20,000,000. The construction will be carried out by the Federal Works Agency.

(S. 191) authorizes $75,000,000 yearly for five years of federal aid for civilian hospital construction by state and local authorities. The law also permits an authorization of $3,000,000 for surveys and planning (July 25, vol. p. 90).

Some bills fail to pass

Various other engineering bills are dead unless Congress is called back for a special session after the fall election, or before Jan. 1, which appears unlikely. In voting upon the House Concurrent Resolution 155, which is known as the reorganization plan No. 1 of the President, Congress failed to approve the President's proposal to make the National Housing Agency a permanent organization. Moreover, the House, by failing to take a final vote, defeated the Wagner-Ellender-Taft housing bill (S. 1592), which, among other things, would have also made NHA a permanent agency.

S. 1716 and H.R. 5083, identical bills creating a Columbia Valley Authority, both failed to pass either branch of Congress.

Despite the fact that it has been approved by the Senate Committee on Foreign Relations, the Senate as a whole failed to reach a vote on the measure (H.R. 4142) to permit the St. Lawrence power and navigation project to be carried out in accordance with the 1941 agreement with Canada relating to the St. Lawrence (June 6, vol. p. 894).

Congress also failed to enact the bill (S. 2316) authorizing the large Bridge Canyon project to be carried out by the Department of Interior to permit the state of Arizona to use its share of the flow of the Colorado River (July 4, vol. p. 6).

The measure (H.R. 5014) authorizing the Reconstruction Finance Corporation to make loans and grants totalling $500,000,000 for planning and construction of public hospitals and public health centers (Jan. 31, vol. p. 151) failed to be passed by either the Senate or the House.

Other legislation that failed to become law includes: S. 1349, which would raise minimum wages (Jan. 31, vol. p. 151); the Missouri Valley Authority bill (S. 555), the Senate having failed to reach a vote on this issue, although two committees made a report on the bill after extensive hearings and a third committee held hearings but made no report (Jan. 31, vol. p. 151); authority (H.R. 4276) for the Public Buildings Administration to construct projects estimated to cost $362,000,000, a list of 4,020 "eligible" projects being submitted (Jan. 31, vol. p. 151).

Also failure to reach passage were: four bills, namely, H.R. 519, H.R. 587, H.R. 4070, and H.R. 6024, pertaining to stream pollution abatement (Jan. 31, vol. p. 151); the plan (S. 1449) for partial stabilization of the construction industry (Jan. 31, vol. p. 151); the proposals (S. 1720 and S. 1850) to create a national science foundation (Jan. 31, vol. p. 151); the House-approved bill (H.R. 6741) amending the Federal Airport Act of 1945, which authorizes a $1 billion construction program, to permit large airports to be started sooner than under the 1945 act.

A measure (S. 1022) which would supplement the 1944 Highway Act by authorizing appropriation of $1 1/8 billion for construction of rural roads; the proposal (H.R. 3172) to provide $25,000,000 to the Public Roads Administration for work on the Inter-American Highway in Central America; H.R. 4982 (corresponding Senate Bill S. 2432) which was aimed at permitting employees of the U. S. Government to assist foreign governments and which met considerable opposition from engineering societies.

Urge speedy Panama Canal expansion

Emphasizing in a preliminary report the need for quick expansion of capacity and security due to the dependence of the U. S. armed forces and the national economy on the waterway, the six-man Board of Consultants on the Panama Canal completed its first session at Panama recently.

After a week's study of the canal itself, work in progress and work planned, the board issued a report generally approving plans of Maj. Gen. Joseph C. Mehaffey, Canal Zone governor, and Col. James A. Stratton, supervising engineer.

Members of the board are: Admiral Ben Moreell, Navy materials chief; Brig. Gen. Hans Kramer, Corps of Engineers; Boris A. Bakhmeteff, of Columbia University; W. H. McAlpine, of the Office of the Chief of Engineers; Hibbert M. Hill, Minneapolis, Minn., consultant; and Joel D. Justin, consulting engineer of Philadelphia, Pa.

With Col. Stratton acting as guide and mentor, the group studied work now under way on a third set of locks near Pedro Miguel and other sites, and listened to reports of meteorologists, hydrologists and engineers on studies now in progress.

Defense first objective

"The ultimate objective," the board's report said, "is to establish secure lines of communications for our armed forces and the supporting economy in times of war and national emergency.

"Recent developments in the material of offensive warfare have served to increase the relative importance of the time element in the mobilization and deployment of the nation's resources when war threatens and after hostilities have started. No one can foresee the exact lines of development of new offensive elements, nor can one foretell now what will be the means of defense.

"We are now confronted with the necessity for early action in the choice of canals with respect to type and location—but with incomplete knowledge of the conditions under which they would have to function. Under the circumstances, and in view of the tremendous importance to the national safety, prudence requires the adoption of a policy fully protective of the national interests.

Costs should not govern

"Experience . . . . indicates the propriety of a plan for duplication and dispersion of vital works. Relative costs in time and money should be considered . . . . but the . . . . costs should not become a governing consideration. A nation with a national income of $150,000,000,000 per annum cannot hesitate over the expenditure of two or three billions when its very existence hangs in the balance."

The board added that in the development of plans for new works or a new canal, four considerations should be paramount: (1) At no stage of the (construction) operations should we have less canal capacity than at present, (2) the canal capacity should be increased as rapidly as possible to accommodate the largest naval vessels, (3) at no stage should security of the canal either from a military or structural point of view be less than at present, and (4) the sequence of the work should be such that work could be terminated at any time without jeopardizing the capacity and security of the canal.

Hold up Pine Flat Dam money pending agreement

Construction of the proposed Pine Flat Dam on Kings River, near Fresno, Calif., will be held up pending the signing of agreements arranging repayment contracts between the Bureau of Reclamation and water users benefited by the dam construction.

At a meeting called at Fresno recently, Richard L. Boke, regional director for the Bureau of Reclamation, and Col. Lester F. Rhodes, Sacramento district engineer, said that field work is essentially complete and design and specification work had proceeded to a point where construction could begin as soon as the contract negotiations were completed. They added that the Army would build and operate the dam, releasing water for irrigation, and urged the water users to cooperate in completing satisfactory repayment arrangements as soon as costs chargeable to irrigation facilities and benefits could be determined.

The dam would be of concrete gravity type, 410 ft. high and 1,850 ft. long. It was estimated to cost $19,700,000 before the war, with present estimates at $36,000,000. Of this total $33,500,000 would be for irrigation and flood control and the remainder for future installation of power facilities.

Representatives of the Kings River Water Association and the Tulare Lake Basin Water Storage District strenuously objected to the bureau's entrance into the picture, listing 15 reservations they said they would insist upon in dealing with the bureau. Among these were such demands as control and operation of the project by water users without federal interference; and elimination of the acreage limitations.

Government details budgeted building work

(*Continued from page* 1)

The Army Engineers will not determine what work is to be curtailed until district office reports are analyzed.

Road work not affected

Restrictions of the OWMR directive do not apply to the provision of federal aid for highways where the federal government has already made commitments to the states for the provision of aid through the approval of programs by the Public Roads Administration. Commissioner MacDonald has advised the state highway departments to this effect after discussion with the Office of War Mobilization and Reconversion.

Mr. MacDonald, has urged the state highway departments to keep federal-aid highway expenditures at a minimum, consistent with the policy of the President in curtailing activities on other federal works in the fiscal year 1947. Any project that has been included in a state program approved by the PRA is considered as a firm federal commitment and can go ahead. Projects requiring structural steel should be wholly eliminated until conditions change radically, the commissioner said, so that fabricators will be able to obtain definite commitments as to delivery and firm prices from the steel mills.

The Public Roads Administration has requested the departments to be more rigid than heretofore in turning down bids that are far above their engineers' esimates. In the past, the PRA would not approve any project more than 50 percent above 1940 prices.

Little airport work started

The 60-day moratorium will have little effect on the airport program of the Civil Aeronautics Administration because that agency does not expect to have any project ready for contract until December, possibly not until spring.

Operations of the Bureau of Community Facilities are not affected by the OWMR directive.

Grant wage boost to Oregon building workers

Wage increases and a 40-hour work week are provided in an agreement between the AFL Building Trades Council of Portland, Ore. and the Portland Housing Authority.

The new agreement, affecting some 500 union employees, provides for a $1.44 base wage scale for the majority of the men—an increase from $1.26 in an earlier agreement.

Construction of Japanese Underground Oil Storage Tanks

Commander Carl J. Scheve, USN Lieutenant G. J. Fox, USNR
Civil Engineer Corps, United States Navy

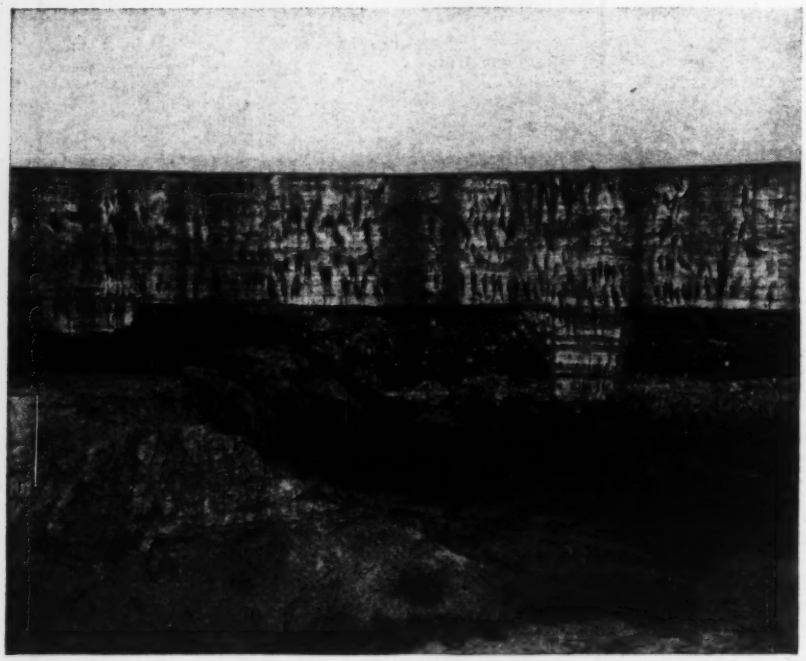
Interesting methods followed by the Japanese in constructing underground oil storage tanks were disclosed by a group of tanks found in varying stages of completion when the naval base at Yokosuka, Honshu, was taken over by the U. S. Navy. Of particular interest are some 125-ft. diameter, 96-ft.. deep steel-lined units with a capacity of 33,000 U. S. tons each.

The tanks are located on a hill about 200 ft. above sea level in a formation of hard, cemented volcanic ash that has excellent structural strength for tunneling or bearing but air slacks badly. This ash, while undisturbed, has the properties of a soft sandstone and for purposes of brevity will be referred to in this article as rock. At the site of the tanks the loose overburden varies from a few feet to as much as 75 ft. in depth.

Construction was carried on as follows: A circular trench was excavated to a depth of 10 ft., an inside form placed in the trench using the wall of the trench for the outside form and concrete 24 to 30 in. thick poured in a ring up to the earth surface. Excavation of the area inside the tank ring was carried down to the bottom of the concrete wall. Where the wall rested on rock, excavation was carried on down without further concrete work. All material was removed from the excavation through a shaft to the pipe tunnel at the bottom of the tank, which permitted disposal through a hillside portal.

If the wall section was bearing on loose overburden or faulted rock, shafts 4 to 5 ft. wide were sunk at 30 ft. centers for a depth of 10 ft. and filled with concrete, as shown below. Excavation was carried down to the bottom of the pillars and concrete placed between the pillars, a procedure that was followed until the concrete wall rested on rock for its full circumference. To prevent air slacking, exposed surfaces of the rock were covered with air-applied concrete, reinforced with wire mesh in some areas.

Excavation completed to the bottom and steel set for first ring of liner. Note herringbone pattern cut for drains and stuffing of volcanic ash after air slacking accured.

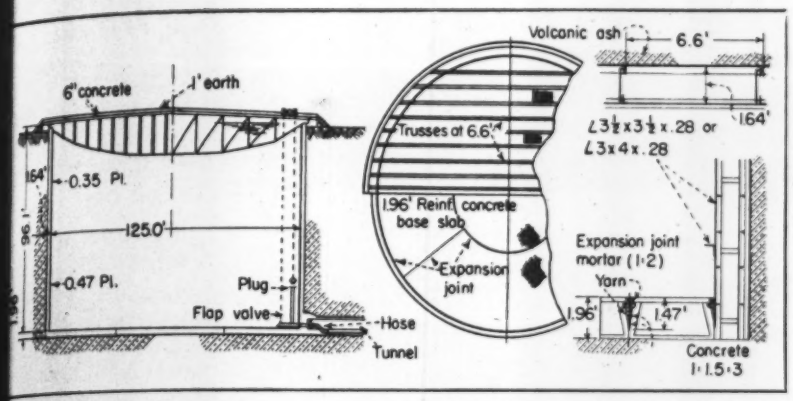


First step in tank construction was excavating a 10-ft. deep trench and pouring a ring of concrete around the tank periphery. Excavation was then carried on inside, and, if ground still was not adequate for support, the concrete ring was underpinned with concrete pillars.

A steel plate lining, of riveted construction and stiffened with angle rings inside, was supported externally by a ladder arrangement placed against the concrete or exterior vertical rock face. After one section of the lining had been put in place, the space between the lining and excavation was filled with concrete. Where groundwater was encountered or anticipated, a pattern of herringbone drains, using 3 in. vitrified tile, was installed in the wall, as is shown above, and covered with sheet metal before the final concrete was placed. Corrugated metal water stops were used at the horizontal joint between pours.

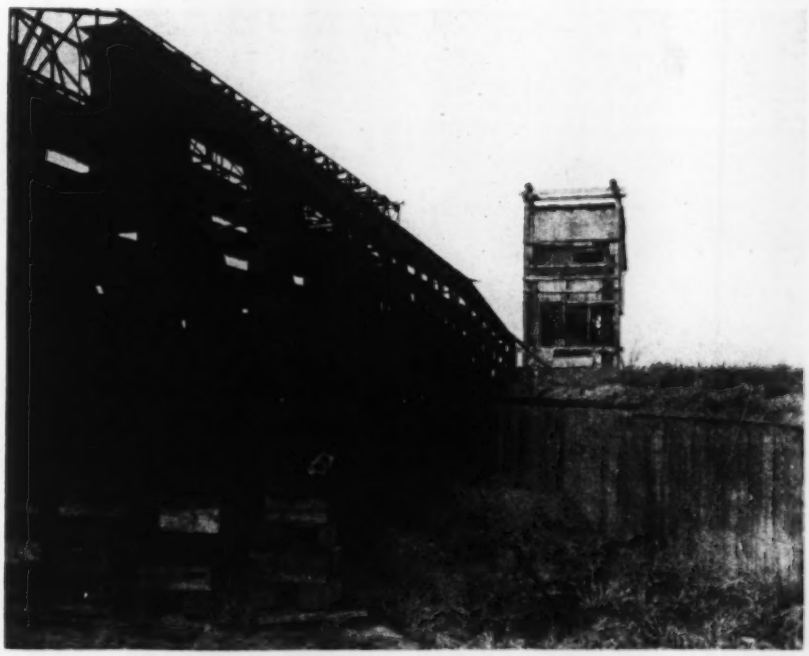
When the tank lining was completed, the trusses shown at right were set in place and a 6 in. concrete slab roof placed over the tank, this in turn being covered with 1 ft. of earth.

No stress calculations are available but from outward appearance the construction seems heavier than necessary, possibly to resist aerial bombing or earthquake stresses.



Details of tanks were made up from the partly-built structures, as plans were found for the highly secret tank farm. Note that clay and yarn were used for caulking around periphery at floor line and also at expansion joints.

Steel trusses (at right) supported a cover of 6 in. of concrete and 12 in. of earth. Tank at extreme right of picture has been covered, but sides have not been backfilled.



The 1.64-ft. opening between the rock and the lining (below) was filled with concrete. Trusses for the roof were set by gantry (lower right) and then concrete slab was poured in place to serve as the cover.

James Stewart & Co. reveals reorganization

M. E. Kalette takes over management as president, other changes listed in 102-year-old organization

M. E. Kalette steps up from vice president to president of James Stewart & Co., Inc., in a reorganization of the management of the famous 102-year-old New York construction firm, succeeding Harry D. Watts, who resigned Aug. 1. Henry G. Olmstead, who left the company in 1938, returns as president of the Chicago subsidiary, replacing Milton E. Crosby, who resigned July 15. Joseph M. Cunningham, who has been a vice president for the past three three years, retains that title in charge of all heavy construction activities. The company's building work will be in charge of Roger Peabody, who returns as a vice president after leaving Stewart last January to form his own contracting firm in Dallas, Tex.

A. B. Cromer, who has been treasurer of the Chicago subsidiary since 1910, becomes vice president of that branch. Ellsworth D. Hubbard, formerly manager of the New York office of James Stewart & Associates, who built the Trinidad Naval Base, has been named secretary-treasurer of the parent corporation in New York.

New directors

A new board of direction has been formed, though the board is not yet complete, as two more members are to be appointed. The present list includes M. E. Kalette, Russell Marston, Joseph M. Cunningham, James A. Fayne, Joseph Frelinghuysen, Jr., and Harold E. Talbott, all of New York City, and Douglas Hatch, Washington, D. C. and G. Edward Buxton, Providence, R. I.

The company was founded by James Stewart at Kingston, Ont. in 1844. It now maintains offices in New York, Chicago, and Dallas. Throughout its 102 years, the firm has completed hundreds of millions of dollars worth of construction of all kinds—heavy and building—in North and South America, England and Japan.

Developed sliding forms for silos

During the recent war, Stewart's construction activities ran as high as $10,000,000 per week. Though not specializing in any type of work, the firm developed the sliding form method of building concrete grain elevators and has become a leader in that field.

At present the company is engaged in contracts all over the United States aggregating $21,000,000. It has just completed the $9,000,000 Naval Hospital at Houston, Tex., to be dedicated Sept. 3.

Arizona roads seen unfit for travel

The Arizona highway department has declared the state's roads unfit to carry this year's travel load—expected to be the greatest in history—tabbing them obsolete and even dangerous in many stretches.

The department gathered statistics that indicate 8,000,000 miles will be traveled on the "obsolete" highways this fiscal year by out-of-state vehicles. Balancing these statistics against a construction program balked by rising costs and limited funds, the department takes a dim view of the future of the state as based on the suitability of its highways.

The 1946-47 highway budget calls for an expenditure of $20,868,000, but contractors' bids have so frequently exceeded cost estimates that the highway commission has refused to award contracts and the program is at a standstill.

$15 million needed

Meanwhile, the highway department estimates that $15,000,000 will be needed just to put the 385 miles of Highway 66 from the New Mexico to the California border into proper condition.

Gov. Sidney P. Osborn made the wartime recommendation that $100,000,000 in road improvement bonds be authorized, but the legislature by-passed the suggestion, holding to a "pay as you go" policy. No major construction or repair was attempted during the war.

Statistics on expected traffic in the state were gained through 94 checking stations, which tabulate, analyze and break down traffic flow. Densities, types of traffic, whether state or out-of-state, whether passenger car or truck all are checked on a 24-hour-a-day schedule.

The department estimated that visitors to the state will spend some $40,000,000, $1,500,000 of which will be collected by the state in gasoline taxes.

Phoenix, Ariz., to vote on $4 million water bonds

Voters of Phoenix, Ariz., will be asked this fall to approve two bond issues totalling about $6,000,000 to provide a more adequate water system for the city and to increase the capacity of the city's airport.

The city contemplates a fund of $4,800,000 for the water system and $1,100,000 as its share of an airport development program.

The water improvement program would include construction of a booster station, new water mains, the sinking of new wells and exploration of other sources of supply. It would be a part of a long-range, $10,000,000 plan proposed some months ago (*ENR* June 13, vol. p. ....) to relieve the city of recurring threats of water shortages.

Plan $6 million belt road at Indianapolis, Ind.

Construction of 10 more miles of a planned $5,600,000 "belt line" highway through the outskirts of Indianapolis, Ind., will be completed in 1947 at a cost of about $1,000,000, the Indiana State Highway Commission said last week.

The 59-mile road, when completed, will form a giant square around the outskirts of the city, permitting cross-country traffic to by-pass the city, and, it is hoped, reducing traffic congestion inside the city.

Started in 1942, two sections of the road, forming the northeast corner of the square, have been completed. Recently the highway commission awarded two contracts totalling a million dollars for two additional sections to be added to the completed part.

Engineer shortage blocks states' highway work

Highway construction programs in three states were reported held up last week by a continuing shortage of trained engineering personnel.

In North Carolina, W. Vance Baise, chief engineer of the North Carolina Highway Commission, reported that his organization is in "desperate need" of qualified engineers. He said that the state could use at least 100 engineers—construction engineers, locating engineers, resident engineers, instrument men, level men, designers, inspectors.

In Pittsburgh, the Allegheny County Commission said it was considering engaging private engineering firms in order to get its major projects under a $32,000,000 bond issue program under way this year. John J. Kane, commission chairman, said that two of the bigger projects to be held up are the Rankin and Dravosburg bridges over the Monongahela River.

Arkansas also shorthanded

Lack of technical help is proving a bottleneck to the Arkansas state highway construction and maintenance program, Highway Director J. C. Baker said last week. He said that his department did not have enough engineers to handle the paper work and act as resident supervisors on the projects now under way and planned. The shortage, he added, was preventing preparation of the next group of jobs planned for award.

Urge solution in Fresno flood project upkeep fight

With money available to start construction on a $1,000,000 flood control project on Dry Creek, near Fresno, Calif., Col. Lester F. Rhodes, Sacramento district engineer, urged quick settlement of a four-way local controversy over maintenance of the project.

Before $200,000 in state funds can be spent to acquire rights of way for the reservoir, state and federal statutes require a guarantee from Fresno County that future maintenance has been assured.

Involved in the controversy is the City of Fresno, Fresno County, the Fresno Irrigation District and the Town of Clovis.

It was thought that the four agencies had solved their differences in June when the proportion of the estimated $10,000 annual maintenance costs to be shared by each was agreed upon (*ENR* June 27, 1945, vol. p. 967), but before the contract was signed Fresno city officials objected to minor details.

Col. Rhodes threatened that funds appropriated might be transferred elsewhere if the rights-of-way were not obtained soon, as construction later would be hampered by spring rains. He pointed out that at least one industrial plant has, at least temporarily, changed its plans to locate in the area because of the threat of floods in case the project is not completed this year. "It seems a shame for the few hundred dollars involved, many millions may be lost," Rhodes said.

New code expert chosen for Cleveland, Ohio

Difficulties in revising the building code of Cleveland, Ohio during the last two years have led to the appointment, by Mayor Thomas A. Burke, of another code expert, Emil Szendy of Garfield, Harris, Robinson & Schafer.

The job is expected to take from six to eight months and to cost between $12,000 and $15,000.

Work on the revision of the code started under Gov. Frank Lausche, when he was mayor of the city. His appointee, James J. Collins, architect, spent 20 months on the job without producing an acceptable code, following which Building Commissioner William D. Guion volunteered his services. Newspaper editorials brought the issue to a head, and Mayor Burke issued an ultimatum—a new code in two weeks. After the city law department and Commissioner Guion failed to produce documents satisfactory to all concerned, the new appointment followed.

Plan huge steam power plant for Illinois

The Illinois Power Company has applied to the state commerce commission for authority to construct, maintain and operate an $18,000,000 electrical generating plant on a site about two miles below Alton, Ill.

H. E. Steinhoff, company vice-president, said that three 40,000 kw. steam-turbine generating units are planned, the output to serve company customers in the area extending from Madison County—just across the Mississippi from St. Louis, Mo.—to points beyond Hillsboro, Mount Vernon and Sparta. Coal will be used for power and river water for cooling purposes.

Shortage of labor delays Honolulu incinerators

Labor shortages are delaying the completion of two new waterfront incinerators in Honolulu, T. H. The total cost of the two incinerators being built on one contract by McDonald Construction Co., St. Louis, Mo., is $1,060,000. To this the federal works administration contributed $619,200.

Already granted a year's extension, the company has had to ask that completion of its contract be extended again from March 31 to Oct. 20 of this year.

The two incinerators will have a capacity of 400 tons per 24 hours of incineration. One, at Kapalama, between Honolulu and Pearl Harbor, is already in use by the city on a "school basis" to train operators and is handling upwards of 150 tons a day. The second, at Kewalo basin in downtown Honolulu is seriously delayed.

Honolulu's garbage load is about 300 tons a day. About 75 tons a day were handled at an old incinerator which will continue in operation. The rest was shipped by rail to two dumps, fairly far removed from the city. One of these was closed down July 1 and the incineration taken over at the new Kapalama plant.

The city chose the incineration method of disposal after ruling out dumps and disposal at sea. Danger of contaminating the island beaches has ruled out disposal at sea—plus the additional wartime threat of ship channels being disclosed by refuse trails. Island land is already at a premium and not enough suitable space is available for dumps.

Both incinerators are on the waterfront. The Kapalama incinerator is supported by 900 40-ft. pilings. Supporting the Kewalo incinerators are 960 pilings, 60 ft. long.

Plan $8 million program for N. Y. state hospital

An $8,750,000 building and improvement program at the Central Islip State Hospital on Long Island, N. Y.—a state institution for the mentally ill—has been approved by the New York State Postwar Public Works Planning Commission. The program constitutes a part of overall plans of the State Department of Mental Hygiene for extension and improvement of its services.

The approved part of the program, consisting of eight projects, provides for construction of four new buildings, a new power plant, renovations and additions to existing structures, and construction of roads, walks, and curbings.

The most important project will be a medical and surgical group to house 1,568 tubercular patients, at a cost of $4,083,000. Another building, for 504 ambulatory tubercular patients is estimated to cost $1,574,000. Other projects include: a power plant, costing $2,060,000; and walks and curbing at the institution, costing $500,000.

Ross E. Sluyter, Director of State Planning for the Commission, said that estimates are based on 1940 construction costs.

New atom research center set at Camp Upton, N. Y.

Maj. Gen. Leslie R. Groves, Commanding General of the Manhattan Project, announced in Washington last week the selection of Camp Upton, N. Y. as the site of a proposed new Northeast National Laboratory.

The laboratory would be one of three research centers planned for work in nuclear physics, and would contain facilities to cost more than $5,000,000 initially for both fundamental and applied science, as well as studies of the application of nuclear knowledge to science and engineering.

The Long Island, N. Y. camp site, once declared surplus by the War Department, was withdrawn recently from surplus lists and transferred to the Manhattan Project.

Nine major educational institutions of the northeast have formed Associated Universities, Inc., to operate the laboratory under contract with the federal government.

Members of the new corporation are: Columbia University, Cornell University, Harvard University, Johns Hopkins University, Massachusetts Institute of Technology, University of Pennsylvania, Princeton University, University of Rochester and Yale University.

MEN AND JOBS

An old hand with a trowel is J. A. Jones, founder of the J. A. Jones Construction Co., Charlotte, N. C., who resumed his first job in the construction field to lay the first brick on a two-story addition now under construction at his firm's headquarters.

A former Army jeep becomes the peacetime steed of Percy H. Bliss, engineer in the Bureau of Reclamation's regional office at Billings, Mont., for inspection trips.

Gus Oberg (left) construction superintendent for the Morrison-Knudsen Co. of Boise, Idaho, talks over details of construction of Cascade Dam with Earl Harmon, construction engineer in charge of the project for the Bureau of Reclamation.

Irwin H. Schram has been appointed chief engineer of the Erie Railroad, succeeding **J. W. Smith,** resigned. Schram joined the Erie in 1908 as rodman on the New York division, and went to Cleveland in 1943 as acting chief engineer. **Blair Bowers,** who joined the Erie in 1912, succeeds Mr. Schram.

J. L. Greenlee, assistant superintendent of the Charlotte, N. C., water department since June 1924, has been appointed superintendent, succeeding **W. E. Vest,** who will remain with the department as consultant.

G. G. Page has been appointed senior construction engineer with the North Carolina State Highway & Public Works Commission.

The partnership of Proctor, Redfern and Laughlin, has been formed at Toronto, Ont., to take over the consulting engineering practice of James, Proctor and Redfern Ltd. **E. M. Proctor** and **W. B. Redfern** of the old firm, together with **W. M. Laughlin,** formerly chief engineer of the Ontario division of the Dominion Bridge Co., are the personnel of the new partnership.

J. H. Dowling, who served as state highway engineer of Florida from 1933 till early this year, has joined the Florida Equipment Co. in the Tallahassee territory. He was graduated from Georgia Tech in 1920 and then joined the Florida department, starting as a rodman. In 1925 he was made division engineer at Lake City, holding that position for four years, and then going to Duval County as assistant county engineer.

George K. Leonard has been named project manager in charge of the Tennessee Valley Authority's South Holston and Watauga projects. He joined TVA in December, 1933, as assistant construction engineer on Wheeler Dam. In 1936 he was transferred to Guntersville Dam as construction engineer, and 1939 was transferred to the Watts Bar Dam, where he served again as construction engineer. He has been associated with the construction industry for over 30 years. He was graduated from the University of Nebraska in 1912, receiving a bachelor of science and master's degree in civil engineering. For the last two years Mr. Leonard has served as chief of the project planning division of TVA's Water Control Planning Department.

Kenneth S. Fitch, San Francisco, Calif., has been appointed Burlingame city engineer to succeed **Cecil Longson,** resigned. From 1939 to 1942, Fitch served as assistant civil engineer for the Bonneville Power Administration at Portland, Ore. He was civil engineer with the Pacific Bridge Co. in San Francisco from 1943 to 1944 and last year served as a civil engineer in the Bureau of Yards & Docks, Navy Department, San Francisco.

Norman B. Conway for the last 7 years assistant district highway engineer at Spokane, Wash., for the United States Indian Service, has been transferred to Phoenix, Ariz., as district highway engineer to supervise the construction and maintenance of roads and bridges on Indian reservations in Arizona, New Mexico, Utah and Colorado.

N. Cirino has opened civil engineering offices at 21 Columbus Ave., San Francisco, Calif., for the design and construction of roads, utilities, water supply, sewage disposal, structures and surveying.

The following personnel changes have been announced by the Pennsylvania Department of Highways: Appointments—**Chalmers C. Miller,** Harrisburg, research engineer at Harrisburg Headquarters; **Ellwood R. Hummell,** Havertown, assistant district construction engineer in District 6, Ardmore; Resignations—**Gerald E. Skinner,** Corry, project engineer in District 1, Franklin.

J. E. Edwards has been chosen county engineer and road superintendent of Sarasota County, Fla. He served six years with the U. S. Engineers on the Mississippi River.

Ellsworth Beinhorn, a civil engineer, has been employed by Exeter, Calif. as superintendent of public works, replacing Allen Jordan.

Sidney F. Bamberger has opened an office with **John Lyon Reid,** for the practice of architecture and structural engineering. He was recently chief structural engineer for Ernest J. Kump Co. in charge of structural design of a $2,000,000 ordnance shop for the U. S. Navy's Bureau of Yards & Docks.

Sterry J. Mahaffey has succeeded A. J. Rayner as executive secretary of the Virginia Road Builders' Association. He

is a graduate of Pennsylvania State College and has been manager of Henrico County, Va., and city manager of Durham, N. C.

Harry Stevens, who has been with the Office of the Chief of Engineers, U. S. Army, for the last five years, has retired. During the war he was in charge of review of projects for sewage collection and treatment at all U. S. Army camps and installations. From 1905 to 1941, Mr. Stevens was in private consulting work in Washington, D. C., specializing in sewage disposal, water supply, and industrial work. According to present plans, Mr. Stevens will now engage in consulting work on a part-time basis.

John C. Sprague, engineer-in-charge of the division materials testing laboratory, South Atlantic Division, Corps of Engineers, U. S. Army, has moved to Marietta, Ga., new headquarters of the laboratory having been transferred there from Jacksonville, Fla. Prior to his connection with the Corps of Engineers, Mr. Sprague was development engineer with Dravo Corp.

W. F. Stokes has been named superintendent of the municipal water and sewer department at Hendersonville, N. C., succeeding **J. H. Lampley,** manager for the last 22 years, who has resigned but will continue to serve in an advisory capacity.

Joseph S. Wilkinson, Columbus, Ohio, president of the Forward Construction Co., has been appointed central housing representative of the National Housing Agency. He will assist mayors' committees attempting to break bottlenecks delaying construction of veterans' homes in several central Ohio counties.

Charles R. Little, Cincinnati, Ohio, an engineer, has been named to succeed the late Alan Jordan, as executive secretary of the Ohio Valley Conservation and Flood Control Congress.

Hugo Benefield, Atlantic, Iowa, is county engineer for Union County at Creston. He replaces **William J. Bester,** who resigned recently to become associated with the Portland Cement Association.

Boucher P. Scull, civil engineer, has been appointed associate director general, research and development branch, Department of Reconstruction, at Ottawa, Ont. He is a graduate of the University of Saskatchewan and has been with the department since completing his recent service with the Royal Canadian Air Force. He succeeds **J. Lorne Gray** who is resigning.

Back to Civilian Activity

L. E. Hoffmann, major, after 5 years in the Corps of Engineers, has joined Polk, Powell & Hendon, engineers, of Birmingham, Ala. Major Hoffmann served recently as chief of the management branch, Repairs and Utilities Division, Seventh Service Command.

Edwin D. Gill, former major in the army engineers, has returned to the North Carolina State Highway & Public Works Commission, as associate bituminous engineer.

Floyd Eugene Brown, Springfield veteran, has been employed by the Illinois Division of Highways as engineering aide.

Returning from military leave to the Illinois Division of Highways as civil engineers are: **Karl E. Luthin, Jr.,** Quincy; and **Lloyd C. Teas,** Carbondale. As field investigator is **Willard G. Snow,** Springfield.

Chester A. Schumacher, formerly civil engineer for the Milwaukee regional planning division, has been appointed senior engineer in the public works department of Waukesha, Wis., to succeed **John Mielke,** resigned.

C. R. Hammond, major in the Army Specialist Reserve, has returned to Seattle, Wash., as vice-president of the General Engineering Co. to be in charge of sewers and waterworks planning. He was in public utilities and property control work in the civil affairs and military government sections.

Hiram W. Sperry, colonel, Corps of Engineers, is now associated with Brewton Engineering Co. Panama City, as general superintendent.

Fred L. Anderly, major and engineering officer with the 338th Engr. Regiment, recipient of the Legion of Merit for reconstruction of the Port of Leghorn, Italy, has returned from service and is chief engineer for the Minneapolis Dredging Co., Minneapolis, Minn.

After five years of military service in the United States, New Guinea and the Philippine Islands, **J. Harper Hamilton,** colonel, Corps of Engineers, has returned to his former position as chief engineer of the South Dakota Public Utilities Commission at Pierre.

Arthur T. Engelage has returned as secretary-treasurer of the Geissler Roofing Co., Belleville, Ill., after service with the U. S. Engineers in the Pacific theater.

Thomas J. Evans, Jr., formerly a lieutenant colonel with the Manhattan Engineer District, is resident engineer for Stone & Webster Engineering Corp. on structures for the plaskon division of Libbey, Owens, Ford Glass Co., at Toledo, Ohio.

W. E. Parker of Seattle, former chief engineer for the Washington State Development Board, has been appointed executive secretary. A graduate of Annapolis, he served recently as a commander in the Naval Civil Engineer Corps.

Col. D. O. Elliott (left) Division Engineer, Great Lakes Division, congratulates Col. Edwin W. Nelson—executive officer, and Lt. Col. J. K. Borrowman—chief of military construction branch, upon completion of their military service. Both men will continue with the division office in civilian status—Nelson as chief of the engineering division and personnel branch and Borrowman as chief of military construction.

ENGINEERING SCHOOL NEWS

Case School engineers devise novel energy-dissipator for Mt. Morris Dam—New dean appointed at Wisconsin—Expansion at Alabama

The designs for the spillway and stilling basin of the Mount Morris flood control dam which the Army Engineers will build on the Genesee River 27 miles south of Rochester, N. Y., have been established by model tests at the Case School of Applied Science, Cleveland, Ohio, under the direction of Prof. George E. Barnes, head of the civil engineering department and consulting engineer on the work.

To George F. Sowers, a 24-year-old hydraulic engineer at the school, Professor Barnes gives credit for suggesting the energy-dissipator steps built integral with the basin sidewalls, as an important element in the final design, which is claimed to be half a million dollars less costly than alternates. Sowers, when discharged from the Navy a few months ago, started working in the hydraulics experimental laboratory at Case, from which institution he was graduated in 1943. A $9,000 working model of the Mt. Morris Dam, built to scale 1/100th actual size, was being completed for studies of the water action when Sowers returned to Case.

The dam's spillway will be 500 ft. wide and will drop flood waters 200 ft. into a basin about 12 ft. below the floor of the river. The water will hit the bottom of the spillway with terrific velocity, and unless this velocity is considerably diminished, the water will scour out the rock and undermine the dam at the base.

The problem of water impact in the spillway basin was especially troublesome because of the nature of the rock formation. U. S. Army Engineers of the Buffalo District found in soil tests that the terrain below the dam is shale. Ordinarily engineers would construct vertical walls at the sides of the spillway basin. Because of the shale formation, however, sloping walls will be much more economical, and the dam therefore was designed for a slope.

When the model at Case was put into operation, tests revealed that the sloping sides would shoot the water toward the middle of the river in two enormous jets, greatly increasing the scouring action in the basin. Case engineers tried numerous devices for "turning the water back on itself" to kill its velocity. One such device, standard in most dam construction, consists of building "baffle piers"—square concrete pillars—against which the water is hurled. The Mt. Morris Dam is provided with 81 baffle piers, set in a double row across the lower end of the basin with a half dozen in a third short row on each side of the basin.

But piers alone did not solve the problem. Sowers reasoned that if the water could be guided along the sloping sides of the basin in a straight line the curving "jet" action would be eliminated. Experimenting with aluminum strips which could be bent easily into desired shapes, he hit upon the idea of a series of gigantic steps along the slope. There are four such steps, each 10 ft. wide and varying in height from 10 to 12 ft. They graduate in length from 180 ft. long at the bottom to a top step 100 ft. long.

A long-range plan for a greater Alabama Polytechnic Institute, involving a 10-year expansion program costing an estimated $8,000,000, has been announced by President L. N. Duncan at Auburn, Ala. Included are 20 new buildings and revision of the streets and sidewalks.

Morton O. Withey, professor of mechanics, has been appointed dean of the college of engineering, University of Wisconsin. Dean Withey, who has served on the faculty for the last 41 years, has been acting dean for the last five months while Dean F. Ellis Johnson, was on leave.

Born in Meriden, Conn., Dean Withey received his bachelor of science degree from Dartmouth and was an assistant in graphics and surveying there, 1904-05, and received a degree in civil engineering, 1905. He went to Wisconsin as an instructor in mechanics in 1905, and has been full professor since 1920. He was a construction testing engineer for the Wisconsin highway commission, 1920-22, and was in charge of steel column testing for the American Society of Civil Engineers, 1924-32. His research in the field of building materials won him the Wason research medal from the American Concrete Institute in 1932. The methods and data he developed from tests on plain and reinforced concrete and on steel columns, on the yield point of structural steel, and on reinforced brick masonry and masonry mortars are widely used.

***Mt. Morris Dam model at Case School**—George F. Sowers of Case School of Applied Science, left, is shown with the working model of the Mt. Morris Dam with which he aided in development of 2 new-type energy dissipators for use in dam construction. With him is Harry M. Ambrose, director of the hydraulics laboratory. Photograph shows the model, 1/100th actual size of the dam, in the hydraulic laboratory at Case, under test conditions. The inset portrait is that of Prof. George E. Barnes, head of the civil engineering department at Case School and consulting engineer on the work.*

Prepare for installation of huge Coulee pumps

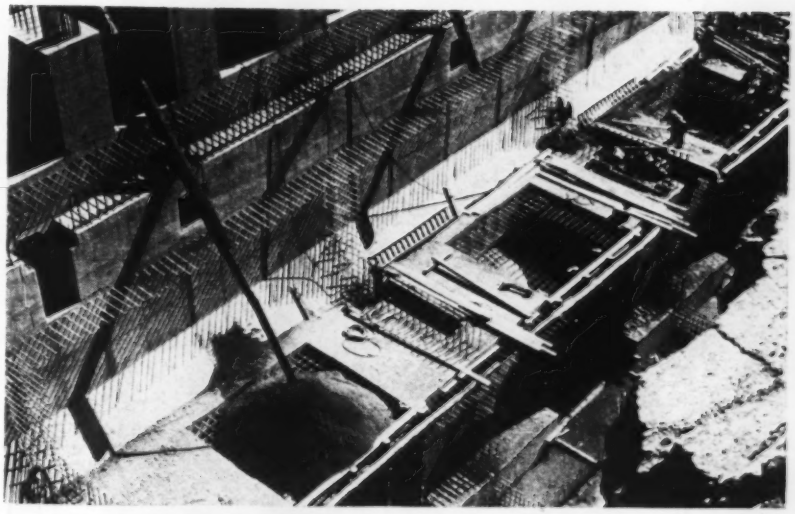
With the recent award of contracts for supplying the mammoth pumps themselves, Bureau of Reclamation workers are rushing the job of preparing a pumping station at Grand Coulee Dam to house the machines that will raise the flow of an entire river 270 ft.

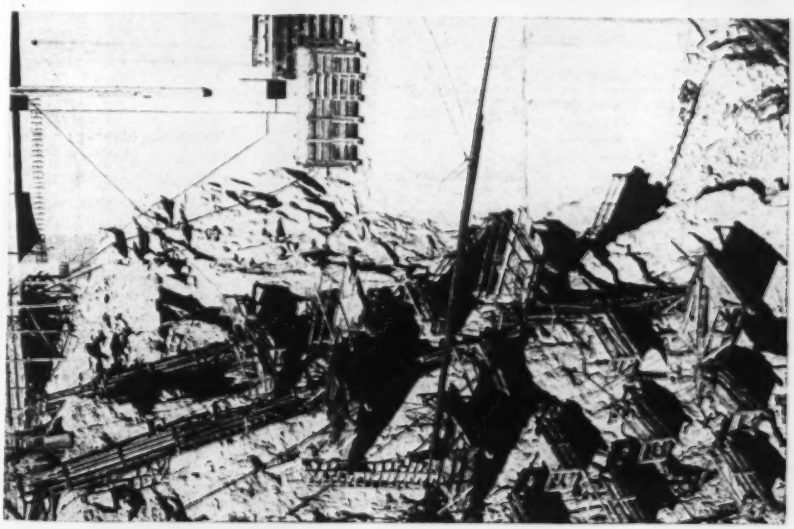
Total cost of the pumps and pumping station has been estimated at $31,000,000.

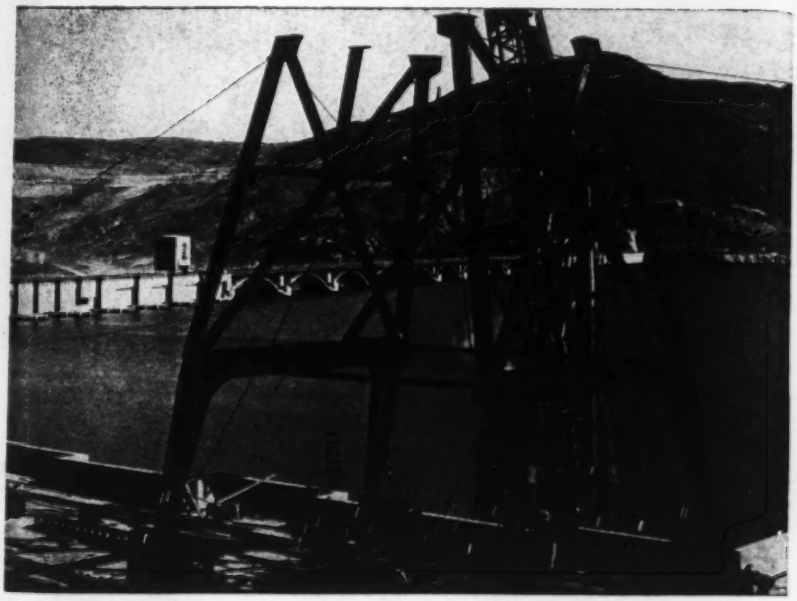
Said to be among the world's largest, the six pumps will be driven by electric motors rated at 65,000 horsepower each (*ENR* Dec. 20, 1945, vol. p. 840), and will be powerful enough to raise 100,000 pounds of water to a height of 270 ft. in one second. Each pair of pumps will be served by one of the 108,000 kw. generators at the dam. Contracts for supplying the machines were recently awarded to the Pelton Water Wheel Co. and Byron Jackson Pump Co., of Los Angeles, Calif., on a low bid of $1,062,000.

The pumps will force water from Lake Roosevelt, the reservoir formed by Grand Coulee Dam, over a hill and into Grand Coulee itself, where a 27-mile lake will be formed by two new dams. From this storage lake, water will flow by gravity to surrounding potential farmlands.

Preparing the way for the concrete building, workers at Grand Coulee have blasted out a site for the pumping plant immediately behind the main dam and are now engaged in pouring concrete for the structure itself. After clearing the area, diamond-drilling operations were carried out to facilitate the placing of dowels to strengthen the granite backwall of the pumping station.







(Top) A chute extending from the pumping plant wing dam immediately behind the main dam is used to load sand around bulkheads as a means of preventing damage from drilling, blasting and other construction activities now in progress.

(Center) Portion of the granite backwall in the pumping plant foundation area. Diamond drill operations in this area have been completed, and dowels are being inserted into the holes to strengthen rock seams.

(Left) A revolving crane is being erected on a gantry that travels on a roadway atop the pumping plant. Upstream side of main dam appears in the background.

OBITUARY

Herbert J. Knopel, Philadelphia, Pa., consulting engineer, died August 5.

George F. Ashton, 74, former city engineer of Salem, Mass., died recently at Lewiston, Maine. A graduate of the Massachusetts Institute of Technology, Mr. Ashton supervised installation of the combined sewage systems in the cities of Peabody, Danvers, Beverly and Salem.

R. A. McAllister, Deputy Minister of Public Works for Ontario since 1937, died at Ottawa Aug. 1. Mr. McAllister was a graduate of Queen's University, and before joining the government service, was president of the Detroit River Construction Co., Ltd.

Floyd W. Spahr, 58, an engineer for the last 35 years with the United Engineers & Constructors, Inc., of Philadelphia, died at Philadelphia recently.

Edward Lawless, 76, a former engineer for the U. S. Engineer Department, died at Milwaukee, Wis. Aug. 3.

Otto A. Wimmer, 68, former president of the Wimmer Contracting Co., East St. Louis, Ill., died at East St. Louis recently.

Arch E. Campbell, 69, formerly county engineer of Jackson, Ohio, died Aug. 3 at Columbus.

H. B. E. Scott, 64, a contractor of New Orleans, La., died there recently.

Carl E. Zenz, 39, president of Carl Zenz & Associates Co., Toledo, Ohio, construction firm, died at Toledo Aug. 4.

G. W. Feagin, 80, retired chief engineer for the Louisville and Nashville Railroad, died August 5 at Webster Groves, Mo.

Baltimore studies new auto parking ordnance

All future structures in Baltimore, Md., built for the accommodation of large crowds of people—with the exception of churches—would be required to provide off-street parking space for their patrons, under provision of a zoning regulation now being studied by the city's planning commission.

The ordnance provides that for every building principally used as a general auditorium, theatre, arena, night club, hall or stadium (or other similar place of public assembly thereafter erected, altered or added to) would be required to maintain off-street parking space equal to 200 sq.ft. for each ten persons of the total seating capacity. A hotel, apartment house, club or similar building, would be required to provide at least one off-street parking space for every ten rooms or suites of rooms in the building.

J. E. Buchanan named president of Idaho U.

Jesse E. Buchanan, who was Dean of Engineering at the University of Idaho from 1938 to 1942 and was recently named Dean of Engineering at Iowa State College, (*ENR* July 18, Vol. p. 82) has resigned his new post to accept the presidency of the Idaho School.

He will succeed Harrison C. Dale, president since 1937, when Dale retires September 1.

Mr. Buchanan is a graduate of the Idaho School, leaving it in 1927 with highest honors. In that year he became an instructor in the college and testing engineer for the Idaho Bureau of Highways, and later engaged in water and irrigation studies. From 1936 to 1938 he was editor of the Asphalt Forum.

Calendar of Meetings

NATIONAL

Building Officials Conference of America, annual convention, Peabody Hotel, Memphis, Tenn., Sept. 2-5.

The Producers' Council, Inc., fall meeting, Hotel Pennsylvania, New York, N. Y., Sept. 25-26.

REGIONAL

Pennsylvania Sewage Works Association, annual meeting, Pennsylvania State College, State College, Pa., Aug. 28-30.

American Water Works Associaton, Southeastern Section, DeSoto Hotel, Savannah, Ga., Sept. 9-11.

American Water Works Assocaton, Western Pennsylvania Section, Roosevelt Hotel, Pittsburgh, Pa., Sept. 12-13.

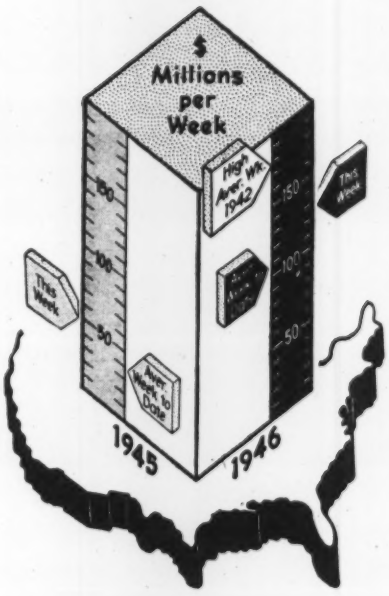
American Water Works Association, Rocky Mountain Section, La Fonda Hotel, Santa Fe, N. M., Sept. 12-13.

Georgia Water and Sewage Association, annual meeting, in conjunction with 15th annual Georgia Water and Sewage School, Georgia Institute of Technology, Atlanta, Ga., Sept. 16-18.

New England Water Works Association, 65th annual conference, Poland Spring House, Poland Spring, Maine, Sept. 16-20.

American Water Works Association, Michigan Section, Park Place Hotel, Traverse City, Mich., Sept. 18-20.

American Water Works Association, Four-States Section, Brunswick Hotel, Lancaster, Pa., Sept. 27-28.



As Reported this week to ...
Engineering News-Record

CONSTRUCTION ACTIVITY

CONTRACT VOLUME

Continental U. S. Only (Thousands of Dollars)

	Week of August 15 1946	Cumulative 1946 (33 wks.)	Cumulative 1945 (33 wks.)
Federal	$3,090	$503,940	$635,144
State & Mun...	24,817	883,679	197,872
Total Public ..	$27,907	$1,387,619	$833,016
Total Private.	101,189	2,145,602	369,793
U. S. Total...	**$129,096**	**$3,533,221**	**$1,202,809**

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Dollar Volume (Thousands)

Type of Work	This Week	Cumulative 1946 (33 wks.)	Cumulative 1945 (33 wks.)
Waterworks	$1,039	$64,079	$33,369
Sewerage	1,296	63,126	20,748
Bridges	2,836	84,843	20,979
Highways	13,418	513,407	137,787
Earthwork, Waterways	1,385	286,000	30,758
Buildings, Public.	7,338	263,610	390,226
Industrial	13,356	657,352	244,080
Commercial ...	85,658	1,361,729	76,722
Unclassified	2,770	249,075	248,140

NOTE: Minimum size projects included are: Waterworks and waterway projects, $22,500; other public works, $40,000; industrial buildings, $55,000; other buildings, $205,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1946 (33 wks.)	Cumulative 1945 (33 wks.)
NON-FEDERAL	$1,097,529	$508,796
Corporate Securities.	313,521	93,940
State and Municipal	559,008	251,256
RFC Loan	.....	24,600
REA Loan	.....	60,000
Fed. Aid Highway..	225,000	79,000
FEDERAL	1,374,866	1,014,412
Total Capital	$2,472,395	$1,523,208

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost	August '46	361.37	173.71
Building Cost	August '46	271.98	147.02
Volume	July '46	327	144

CONSTRUCTION REPORTS

Bids Asked — Low Bidders — Contracts Awarded

(Daily service also available—Write for details)

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *J. A. MAHONEY, Reports* *J. V. McEWEN, M. R. ROESSLER, Statistics*

WATER SUPPLY

BIDS ASKED

Bids Asked August 19

Kan., Riley—Claude R. Haas, city clk., drilled well, pump house, pipeline also furnishing and installing water supply pump, chlorinator, etc. Plans deposit $5. Wilson & Co., 223 N. Santa Fe St., Salina, engrs.

Bids Asked August 20

Ill., Metamora—Village, Village Hall, WW imprvs. $35,000. Plans deposit $5. Austin Engr. Co., 215 S. Jefferson St., Peoria, engr.

Mass., Hanson—Town, Bd. Water Comrs., Liberty St., 16,000 ft. watermains, appurtenances.

Bids Asked August 22

Mass., Wenham—Town, Bd. Selectmen, Town Hall, August 1, water mains, contract 4 sect. 1 and 2 from Gil Wyner & Co., 294 Washington St., Boston. **$45,601.** CD 7/16—ENR 7/25.

N. C., Franklin—Town, T. W. Angel, Jr., mayor, street imprvs., watermain and sewer extensions. Plans deposit $5. The Harwood Beebe Co., Montgomery Bldg., Spartanburg, S. C., engr.

S. C., Eau Claire—Town, Comn. Pub. Wks., ½ million gal. addn. to existing filter plant, water mains, valves, hydrants, etc., 1, 250,000 gal. capacity steel tank on tower. Plans deposit $25. Tomlinson Engr. Co., 1307 Marion St., Columbia, engr.

Bids Asked August 27

Ia., Fairfield—City, City Hall, WW imprvs. $100,000. H. C. McKean, Fairfield, consult. engr.

Bids Asked August 29

Tex., Port Arthur—Port Arthur, pumping unit. $30,000. J. J. Rady, Insurance Bldg., Fort Worth, engr.

Bids Asked August 30

Ia., Bedford — Town, Bd. of Water Wks Trustees, H. E. Nelson, secty, and city clk., furnishing and installation of one 200,000 gal. double elipsoidal steel tank on tower, fdn., auxiliaries, etc. Plans deposit $10. S. R. Weir, State Savings Bank Bldg., engr.

Bids Asked September 3

Wash., Everett—Snohomish Co. Pub. Utility Dist. No. 1, 1917 Hewitt Ave., 18 mi. 4 and 6 in. asbestos pipe for water sys., in Lake Stevens area, over $22,500.

Bids Asked September 5

Tex., Robstown—Nueces Co. Water Imprv. Dist. 3, Robstown, filter plant imprvs., expan. Plans deposit $15. Myers & Noyes, 320 Nixon Bldg., Corpus Christi, archts.

Bids Asked September 6

Md., Hyattsville — Washington Suburban Sanitary Comn., Hamilton St., erecting welded steel reservoir for storing water, 10,000,000 gal. cap. H. R. Hall, ch. engr., adv. ENR 8/15.

Bids Asked September 10

†Mont., Savage—Bureau Reclamation, Custom House, Denver, Colo., two motor-driven, horizontal-shaft, single-stage, centrifugal-type pump units, each complete with pump, motor, flexible coupling, baseplate and all accessories required for complete operating unit. Savage Pump. Plant, Savage Unit, Spec. 1460.

LOW BIDDERS

Ark., Mountain Home—City, V. E. Hutcheson, mayor, City Hall, rejected bids July 23, imprv., exten. WW sys. CD 7/10—ENR 7/18.

Calif., Oakland—East Bay Municipal Utility Dist., 512 16 St., Oakland, July 31, constructing 3,500,000 gal. cap. Forestland Reservoir near intersection of Colton Blvd. and Saroni Dr. from Erickson, Phillips & Weisberg, 3341 Telegraph Ave., **$117,351.** CD 7/23.

★**Calif., San Diego**—City, Civic Center Bldg., August 6, Grossmont tunnel, from L. E. Dixon Co., 609 S. Grand Ave., Los Angeles. **$709,130.** CD 7/16—ENR 7/25.

Ill., Chicago—City, Dpt. P. Wks., City Hall, Aug. 1, electrical work III, South Dist. Filtration Plant, from Harmon Electric Co., 724 S. Cicero St. **$32,871.** CD 7/24.

Ia., Crystal Lake — City, Rush Cagrielson, clk., rejected bids July 26, imprv. water works sys. incl. well, turbine pump, etc. Currie Engr., Co., Webster City, engr. CD 7/17—ENR.

N. Y., Poughkeepsie—Dpt. P. Wks., City Hall, July 29, reconstructing Sand Filters 2, from Kuehar Bros., Montvale, N. J. **$32,000.** CD 7/12—ENR 7/18.

Ore., Forest Grove—City, City Hall, 5 m. g. reservoir, from Halvorson Constr. Co., Salem. **$108,258.** Cornell, Howland, Hayes & Merryfield, Corvallis, engrs. CD 7/23.

R. I., Tiverton—Town, Stone Bridge Fire Dist., rejected bids July 22, water sys., contract 2. **$215,786.** CD 7/31—ENR 8/1.

Tex., Amarillo—City, A. P. Hancock, mgr., City Hall, c.i. water pipe, from U. S. Pipe & Foundry Co., Praetorian Bldg., Dallas. **$136,000.** CD 6/28—ENR 7/11.

Tex., Dallas—City, City Hall, watermains, south part Sec. 3, Wynnewood addn., from E. L. Dalton Co., 406 Great National Life Bldg. **$22,860.**

CONTRACTS AWARDED

Fla., Miami—City, c/o Dpt. Water & Sewers, imprv. water facilities, to J. Lawrence Kelley, 5777 NW 7 Ave. **$32,529.** G. A. Weigand, ch. engr.

★**Fla., Tampa** — City, c/o Mayor Hixon, imprv. filter plant and pumping station, to Lewis & McDowell, 285 Madison Ave., New York, N. Y. **$698,672.** CD 7/24.

Mass., Seekonk—Town, Water Supt., standpipe, steel constr., concrete fdn. to Pittsburgh Des Moines Steel Co., 270 Broadway, New York, N. Y. **$35,000.** CD 8/2.

Mass., Westboro — Town, Water Dpt., water sys. incl. watermains and pumping station to Pittsburgh-Des Moines Co., 270 Broadway, New York, N. Y. **$34,000.** CD 4/5—ENR 4/18.

Minn., Howard Lake — Village, A. C. McGrew, clk., July 27, WW. imprvs. 12,000 lin. ft. of 4 to 8 in c.i. pipe and accessories, furnish and erect 75,000 gal. elevated steel tank dismantle existing tank and steel tower to Phelps-Drake Co., 825 Metropolitan Life Bldg., Minneapolis. **$40,669.** CD 7/17.

Mont., Malta—City, City Hall, exten. water distr. sys. in Dist. 9, sewers in Dist. 13, to E. Johnson, Glasgow. **$48,000.** Bids 7/1. Corwin & Co., Inc., Medical Arts Bldg., Great Falls, engr.

Pa., Hanover — Hanover Municipal WW Comn., York St., mechanical work, filter plant addns., to Roberts Filtering Co., 6 and Columbia Ave., Darby. **$83,780;** chemical bldg. and settling basins and appurtenances, to O. H. Hastetter, 34 Frederick St., Hanover. **$73,340.** Awarded 8/1. CD 4/26.

N. B., Hartland—Municipality, water mains to Murray A. Smith, Hartland. **$26,000.** R. Smith, Town Hall, engr.

Ont., Owen Sound—Dpt. Veterans Affairs, Ottawa, water mains and house services at Sub-division 0-60 to R. F. Booth Const. Co., Ltd., 1935 Drummond Rd., Niagara Falls. About **$35,000.** H. S. Philps & Co., 44 Holme St., Brantford, engrs.

PROJECTS COVERED

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks $22,500; other public works $40,000; industrial buildings $55,000; other buildings $205,000.

Classes of Construction

(Name in order of Listing)

Water Supply	Latin America
Sewers, Waste Disposal	Public Buildings
Bridges	Commercial Buildings
Streets & Roads	Industrial Buildings
Earthwork, Waterways	Unclassified

Stages Reported

PROPOSED WORK: Including appointment of engineers or architects.

BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR.;

LOW BIDDERS: On jobs below **$500,000** value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Symbols and Abbreviations Include:

†	Federal Government
★	Project of $500,000 or over
ENR	Engineering News-Record
CD	Engineering News-Record Construction Daily

SEWERS, WASTE DISPOSAL

BIDS ASKED

Bids Asked August 19

Ont., Sudbury—City, H. P. McKeown, 87 Cedar St., clk., outfall sewer exten., incl. laying of 1,844 lin. ft. of 48 in. rein.-con. pipe, 815 lin. ft. of 27 in. rein.-con. pipe and 345 lin. ft. of 24 in. rein.-con. pipe. About $120,000. Plans deposit $5. CD 5/21—ENR 5/23.

Bids Asked August 21

Wash., Vancouver—City, City Hall, machinery and equip. for primary sewage treatment plant. $45,000. Plans deposit $5. M. E. Ray, city engr. Stevens & Koon, Spalding Bldg., Portland, Ore., consult engrs. CD 11/14/45—ENR 11/29/45.

Bids Asked August 23

Fla., Gainesville — University of Florida, G. F. Baughman, asst. business mgr., installing sewage treatment plant at University of Florida. Plans deposit $25. Reynolds, Smith & Hills, 10 S. Laura St., Jacksonville, engrs.

Bids Asked August 26

Tex., Victoria — City, B. T. Jordan, mayor, incinerator plant. $45,000.

Bids Asked August 28

Tex., Lorenzo—City, c/o Secty., 17,140 ft. 4 to 8 in v. t. pipe, 16,500 ft. Trench varying from 0 to 16 ft., 22 sewer manholes 4 to 16 ft., 13 sewer cleanouts, 6 drop manholes and one sewage disposal plant, J. E. Ward, Allison-Duncan Bldg., Wichita Falls, engr.

Bids Asked September 3

O., East Cleveland—L. C. Carran, city mgr., 14340 Euclid Ave., design and construction incinerator. $175,000. CD 5/28—ENR 6/13.

LOW BIDDERS

Calif., Berkeley—City, City Hall, rejected bids July 31, storm sewer in Russell St. 144 ft. west of Calif. St. to Grant St. north on Grant St. to Bancroft Way. L. B. **$105,541.** CD 7/29—ENR 8/1, under LB.

Ill., Ottawa—City, City Hall, July 22, Northwest Ottawa drainage work, in Hollywood Area, to prevent recurrent floods, from Pietro Scalzetti Co., 3410 N. Linder Ave., Chicago, Zone 41. **$77,552.** Est. $90,000. CD 7/17—ENR 2/21.

Ia., Carter Lake—Town, Carter Lake, D. R. Hill, town clk., received no bids July 22, sewers in sanitary sewer Dist. No. 1. **$83,563.** H. H. Henningson, 626 Standard Oil Bldg., Omaha, Neb. CD 7/10.

N. H., Laconia—City, Municipal Offices, City Hall, rejected bids July 10, sewage disposal, sewer mains, pumping station, etc., $425,000. CD 6/26—ENR 7/4.

★**N. C., Wilmington**—City, J. R. Benson, clk., July 30, sanitary sewer extens., from A. H. Guion & Co., Wilkinson Blvd., Charlotte. **$601,851.** Est. approx. $325,000 CD 6/27—ENR 5/2.

Ore., Eugene—City, City Hall, July 29, Amazon intercepting sewer project, from Empire Constr. Co., 4506 S. S. 39 St., Portland. **$77,470.** CD 7/16.

Tenn., Nashville — City, City Hall, street and sewer imprvts., from G. M. Ferris, Athens. **$99,897.** CD 4/15—ENR 5/2.

CONTRACTS AWARDED

Ga., Decatur—City, c/o Comrs., City Hall, constructing 9,640 lin. ft. storm and sanitary sewers and 4,000 lin. ft. outfall channel, to W. L. Cobb, Decatur. **$139,200** F. M. Daves, 774 Spring St. N. W., Atlanta, engr. CD 6/21—ENR 6/27.

★**Ill., Chicago**—Sanitary Dist., 910 S. Michigan Ave., southwest sewage treatment works, Div. AE, to Northern States Co., 33 N. LaSalle St., **$525,968.** CD 7/16—ENR 7/25, under L. B.

SEWERS, WASTE DISPOSAL (Contracts Awarded, Cont'd.)

La., New Orleans—Garbage Dist. 1, 600 Helois Ave., Metairie, garbage incinerator, to Excavators, Inc., 906 Carrollton, Metairie, New Orleans, **$184,886**. Bids 7/29. CD 7/11—ENR 7/18.

Pa., Phila.—City, Dpt. P. Wks., City Hall Annex, sewers, Henry Ave., Sched. A-1, and Osborne St., Sched. A-3, to Ernest Ventresca, 820 E. Haines St., **$41,515** and **$45,569** respectively. T. Buckley, ch. engr. Awarded 8/3. CD 3/1—ENR 3/21.

Wash., Omak—City, City Hall, sewerage system, to R. L. Moss & Co., Zenith, **$118,900**. CD 6/19—ENR 6/27, under LB.

Ont., Fort William—City, D. M. Martin, clk, sewer service, to Haiquoila, Ltd., Brown and Amelia Sts., **$52,248**. H. M. Woodhouse, c/o owner, engr., CD 4/4—ENR 4/18.

Ont., Picton—Town, F. L. Ward, clk., sewerage sys., to H. J. McFarland Const. Co., Ltd., Elizabeth St. **$388,997**. Bids 7/20. CD 7/10/46—ENR 11/11/43.

Ont., St. Thomas—City, sanitary sewer in southwestern section of Homedale Sub-division; sedimentation tank and rein.-con. culvert, Mill Creek Ravine, to Elgin Const. Co., Ltd., Talbot St. E., **$76,395**. Bids 6/20. CD 6/12.

BRIDGES

BIDS ASKED

Bids Asked August 20

Iowa—State Hy. Comn., Ames, 210 x 20 ft. continuous I-beam bridge over Pony Creek, on local road, Sect. 25, Proj. S-1030 (1), Clayton Co.; one 12 x 12 x 47 ft., rein.-con. box culvert, incidental grading, on Iowa 276, northwest of Spirit Lake, Proj. P-986, Dickinson Co.; 3 rein.-con. box culverts and extens. on County Trunk Rd. B from County Trunk Rd. J west, Proj. S-877 (1); 8 rein.-con. box culverts and extens. on County Trunk Rd. J, Proj. S-878 (1), both Floyd Co.; 5 rein.-con. box culverts, on local road from U.S. 18, near SE corner Sec. 25-97-42, north to Osceola Co. line, Proj. S-1031 (1), O'Brien Co.; 62 x 22 ft. I-beam bridge on local road over Cedar Creek Drainage Ditch 181, Sect. 5, Cedar Twp., Proj. S-1081 (1), Pocahontas Co.; 4 rein.-con. pipe roadway culverts with concrete flumes, 4 rein.-con. box culverts, etc. and extens, 1 rein.-con. box culvert with concrete flume, on Iowa 49, from Iowa 319, southerly to Lake of Three Fires State Park, Taylor Co.; 4 rein.-con. pipe roadway culverts with concrete flumes on local road from SW corner sect. 16-89-28 north and west, to NE corner Sect. 16-89-28, Proj. S-909 (1), Webster Co.; outlet and cattle way for twin 8 x 8 x 28.5 rein.-con. box culvert, U.S. 52, northwest of Decorah Sect. 18, Canoe Twp., Proj. FN-98-B, Winneshiek Co., all foregoing under $40,000; 333 ft. 6 in. x 22 ft. continuous I-beam bridge over South Skunk River on County Trunk Rd. T, Sect. 28, Richland Twp., Proj. S-177 (1), Mahaska Co.; 180 x 26 ft., continuous concrete girder bridge over Timber Creek, on relocation of US 30, southeast of Marshalltown, Proj. F-881 (1), Marshall Co.; 22 x 210 ft., continuous I-beam bridge over West Nodaway River, Sect. 28, Jackson Twp., on County Trunk Rd. N, Proj. S-997 (1), Montgomery Co.; 20 rein.-con. box culverts and extens., 1 rein.-con. flume and 1 rein.-con. pipe culvert and flume, on US 65 from Missouri State line, northeasterly through Lineville, Proj. FA-770-C (1); 10 rein.-con. box culverts and extens. and concrete flumes, 1 rein.-con. arch culvert, 4 rein.-con. pipe roadway culverts with concrete flumes, U.S. 65 from Iowa, 2 south toward Lineville, Proj. F-770 (4), both Wayne Co., all foregoing over $40,000 each. F. R. White, Ames, ch. engr.

Kan., Fredonia—Wilson Co., Fredonia, rein.-con. box culvert Br. 1, Proj. S-338 (1); Br. 2, Proj. 338 (1); steel beam spans Proj. 338 (2).

South Carolina—State Hy. Dpt., Columbia. 200 ft., rein.-con. bridge over Turkey Creek near Donalds, Route 256, Docket No. 1.237, F.A.S. Proj. No. S-111 (1), Abbeville Co.; 196 ft., rein.-con., structural steel bridge over Wadboo Swamp between Honey Hill and Moncks Corner, Route 179, Docket No. 8.221, F.H. Proj. F.H.E.C. 21 (2), Berkeley Co.; 120 ft., rein.-con. bridge over North Rabon Creek and 150 ft. rein.-con. bridge over South Rabon Creek, near Gray Court, Route 101, Docket No. 30.245, F.A.S. Proj. S-139 (1), Laurens Co.; 690 ft., rein.-con. bridge over Lynches River and 0.453 mi. graded and asphaltic concrete surfaced approaches near Bishopville, Route 15, Docket No. 31.219, Proj. F.I. 67 (6), Lee Co.

Bids Asked August 21

★**New York**—Bureau Contracts & Accts., Governor Alfred E. Smith State Office Bldg., Albany, 160 ft., truss span, 0.7 mi. Clinton Co., $240,000; 240 truss span 0.68 mi. Onondaga Co., $335,000, adv. ENR 8/16.

Bids Asked August 23

Minn., Austin—Mower Co. C. M. Hubbard, aud., bridge 6645, three 36 ft. I-beam spans, 24 ft. roadway, 3.6 mi. northwest of LeRoy, SP 50-508-03 (SAR 8), Minn. Proj. S 297 (1). Over $40,000. Plans deposit $1.10. O. L. Kipp, engr., state hy. dpt.

Virginia—Dpt. Hys., Richmond, box culvert Route 560, S.P. 633 (Drainage), Elizabeth City Co.; underpass and approaches Route 23, S.P. S-564-M5, B4, Wise Co.; bridge over Mine Run and W.B. Macadam approaches Route 20, S.P. S-627-G, B1, Orange Co.; 102 ft. bridge over Rock Castle Creek and approaches Route 40, S.P. S-01403-A, B1, Patrick Co.; Plans deposit $5, bridges Route 350, S.P. SN-U-FAP; SN-WPGH-FAGH-1400-B-8, 10, 11, 12, F.P. SN-U-FAP-87 (5); SN-WPGH-FAGH-87 (4), Fairfax Co.; bridge over Carrk Creek, Route 64, S.P. S-1252-B3, Russell Co. Plans deposit $2.

Bids Asked August 21

Kan., Wellington—Sumner Co., Wellington, cont. beam spans, State Creek Bridge, Proj. S71 (1). CD 9/8/44—ENR 9/21/44.

Bids Asked August 26

Tex., McGregor—McLennan Co., Courthouse, Waco, timber and concrete hy. vehicle bridge, $40,000.

Bids Asked August 27

Indiana — State Hy. Comn., J. H. Lauer, chrmn., Indianapolis, rein.-con. arch twin structures over A Lateral to Pond's Flat Ditch north of Rd. 57, 1 30 ft. span, 111 ft. roadway, approach grading and paving 0.057 mi., rein.-con. girder over Pond's Flat Ditch north of Rd. 57, 1 32 ft. span, 39 ft. roadway, 0.057 mi. approaches, rein.-con. arch over Drainage Ditch north of Rd. 57, 35 ft. span, 111 ft. roadway, 0.060 mi. approaches, rein.-con. girder over Little Pigeon Creek, north of Rd. 57, 32 ft. span, 39 ft. roadway, 3 spans, 60 ft., 28 ft. roadway, 0.246 mi. approaches, steel beam, 1 55 ft. span, 39 ft. roadway, 0.066 mi. approaches, Vanderburgh Co.; steel truss, one 125 ft. span, 28 ft. roadway, 2 walks, 0.265 mi. approaches, over Bean Blossom Creek, Monroe Co.; one 125 ft. steel truss span, 28 ft. roadway, 2 walks, 0.057 mi. approaches, over Yellow River, Marshal Co.; one 12 ft. span, rein.-con. slab 42 ft. roadway, over Aetna Ditch, Davies Co.; boring test holes for bridge structure foundations, 300 lin. ft. rock and earth borings, Jefferson Co. C. E. Vogelsang, c/o owner, ch. engr.

Maryland—State Roads Comn., Baltimore, Contr. M 354-4-381, two span thru steel girder bridge with concrete deck, supported on concrete piers and alternates to carry tracks of B. and O. R.R. over Georgia Ave., in Silver Spring, Montgomery Co. Plans deposit $5.

Bids Asked September 4

California — State Div. Hys., Pub. Wks. Bldg., Sacramento, structural steel girder bridge, grading approaches 0.26 mi., bituminous surfacing, north fork of American River, 2 mi. east of Auburn, Placer and El Dorado Counties. G. T. McCoy, hy. engr.

LOW BIDDERS

★**Ill., Chicago**—City, Dpt. P. Wks., City Hall, July 31, temporary bridge West Van Buren St., from Great Lakes Dredge & Dock Co., 122 S. Michigan Ave., **$628,991**. CD 7/26.

Kentucky—State Dpt. Hys., Frankfort, Aug. 2, 0.454 mi. bridge, Metcalfe Co., from Lyons & Breedon, Rogersville, Tenn. **$98,174**. CD 7/17—ENR 7/25.

Missouri—State Hy. Dpt., Jefferson City, Aug. 2, rein.-con. rigid frame spans, over Route 77 TR, St. Louis Co., from Fred Weber, Jr., 7929 Alabama St., St. Louis. **$156,154**. CD 7/24.

Missouri—State Hy. Dpt., Jefferson City, no Aug. 2 bids received, I-beam spans, over Lateral Ditch 3, Proj. S-50 (3); over Drainage Ditch 85, Proj. S-55 (2); over Drainage Ditch 84, Proj. S-55 (2); over Drainage Ditch 66, Proj. S-407 (1), Pemiscot Co.; over Main Ditch, Proj. S-49 (1); over Main Ditch, Sta. 149 plus 50, Proj. S-49 (1); over Maple Slugh Ditch, Proj. S-49 (1), New Madrid Co.; over Lateral 2 of Main D. D. 12, Proj. S0134 (1); over Havey Cypress Ditch, Proj. S-208 (1); over Kinnamore Ditch, Proj. S-208 (1), Sec. A; Sec. B, Dunklin Co.; over Main Ditch Dist. 37, Stoddard Co.; over Lateral Ditch 2, Proj. S-50 (3); over Salt River, Proj. S-136 (1), Sec. B, Shelby Co.; over Big Grassy Creek, Proj. S-548 (2), Sec. B, Lewis Co.; concrete slab spans, in Drainage Ditch, Proj. S-134 (1), Dunklin Co.; Proj. S-763 (3), Miller Co.; Proj. S-763 (3), Miller Co.; Proj. S-136 (1), Sec. A, Shelby Co.; Proj. FAS-179 (2), Hickory Co.; Proj. S-548 (2), Sec. B, Lewis Co.; Wingwalls extens., Proj. S-14 (8), Morgan Co.; rein.-con. deck girder spans, Proj. FAS-178 (2), Hickory Co. C. W. Brown, ch. engr.

★**New York** — Bureau Contracts & Accts., Governor Alfred E. Smith State Office Bldg., Albany, Aug. 7, imprv. 0.26 mi. Bronx Co., from Slattery Contg. Co., Inc., 72-02 51 Rd., Woodside. **$814,001**. Withdrew bids imprv. 1.12 mi. Nassau Co.; no bids received imprv. 0.4 mi. Erie Co.; 0.32 mi. Allegany Co.; 0.07 mi. Steuben Co. CD 7/25——ENR 8/1.

★**N. Y., New York**—President, Manhattan Boro, Municipal Bldg., Zone 7, Aug 7, Sect. 1, Contr. 60, viaduct foundation and superstructures for elevated public highway, with ramp approaches in West and Marginal Sts., from Barclay to Rector Sts., etc., from P. T. Cox Constr. Co., Inc., 270 Bway. **$1,638,538**. CD 7/29—ENR 8/1.

North Carolina—State Hy. & Pub. Wks. Comn., Raleigh, rejected bids June 25, 6.138 mi. grading, overhead bridge, approaches, South and North Hamilton Sts., High Point, L.B. **$89,753**. CD 6/28—ENR 7/4.

Pennsylvania—State Hy. Dpt., Harrisburg, August 2, imprv. 0.71 mi. Delaware Co., from Henry W. Horst Co., 1505 Race St., Phila., **$345,968**. CD 7/10—ENR 7/18.

South Carolina—State Hy. Dpt., Columbia, Aug. 1, bridge over Saluda River, Greenville and Pickens Counties, from Pennell & Harley, Inc., Spartanburg, **$190,164*****bridges over Big Swamp, Florence Co., from D. M. Rickenbaker, Union, **$181,281*****bridges over Lynches River Swamp, Florence Co., from Simons-Mayrant Co., 16 Broad St., Charleston, **$138,029***** bridge over Broad River, Cherokee Co., from F. A. Triplett, Chester, **$174,095*****bridge over Coosawatchie River, Allendale and Hampton Counties, and Alt. 1, bridge over S.A.L. Railroad and 0.510 mi. approaches, Kershaw Co., from Wannamaker & Wells, Inc., Orangeburg, **$74,213** and **$150,738*****No bids received, Alt. 2, bridge over S.A.L. Railroad and 0.51 mi. approaches, Kershaw Co.; bridge over Parks Creek, etc., Abbeville Co. CD 7/17—ENR 7/25.

CONTRACTS AWARDED

★**†Illinois**—U. S. Eng., 800 U. S. Court House and Custom House, 1114 Market St., St. Louis, 1, Mo., vehicular bridge serving hy. traffic only over Chain of Rocks Canal, relocation of U. S. Hy. 66, Madison Co., to Bushman Constr. Co., P.O. Box 107, St. Joseph, Mo., **$1,585,073**. CD 7/9—ENR 7/18 under LB.

★**N. Y., New York**—Triborough Bridge & Tunnel Auth., Admin. Bldg., Randalls Island, Zone 3, painting Triborough bridge, approaches, etc., to J. I. Haas Co., Inc., 51 E. 42 St., Zone 17. **$558,837**. CD 7/15—ENR 7/18.

Utah—State Rd. Comm., Salt Lake City, July 29, 75 ft. span, concrete, steel bridge over Weber River, Morgan Co., Proj. S-247 (10), to F. R. Knowlton, Layton, **$26,915**. R. W. McLeese, St. Rd. Engr. CD 7/22.

Man., Winnipeg—Municipality, reconstructing Arlington St. Bridge, to Intrusion Prepakt Co. Ltd., Union Station, Toronto, Ont. **$50,000**. G. D. Hurst, City Hall, Winnipeg, archt.

Sask., Lloydminster—Town, c/o W. M. Cardiff, clk., seweers and watermains, to Henry Borger & Son, 194 Osborne St., Winnipeg, Man., about **$72,000**. CD 6/25—ENR 6/27.

STREETS AND ROADS

BIDS ASKED

Bids Asked August 19

Connecticut—State Hy. Dpt., W. J. Cox, hy. comr., State Office Bldg., Hartford, grading, drainage, Wilbur Cross Hy., Vernon Fl-1401 (1), Wilbur Cross Hy., Vernon-Tolland Fl-130 (1), Winchester-Barhamsted-New Hartford, F-131 H (1), 6 rein.-con. box culverts, arch bridge, concrete slab bridge, U. S. Rts. 44; graveling Frank Beach, Fort Hill, West Meeting House, Decker Rds., in New Milford; Staffordville Rd., 16 ft. rein.-con. bridge over Roaring Brook, Union; Roxbury, Golf Links, Bethlehem Rds., Washington; Leonard's Bridge Rd., Lebanon; Bartlett Manor, Lake Cavanaugh, Gordon Girard, Richelieu, Van Ness and Silk Sts., Norwalk; Brown Brook Rd., 7x10 ft. rein.-con. box culvert, approaches, Southbury; Milton Rd., Goshen; Lenox Ave., Auburn, Deefield; Pond Sts., Norwalk; Archer Hill Rd., Watertown; Magnolia, Highwood Aves., north and south, Norwalk; Fire St., rein.-con. slab bridge over Oxoboxo Brook, Montville; Landhoff Rd., Borah; Rattlesnake Ledge, Gungee, Old Chesterfield Rds., Salem; storm sewer, Dixwell Ave., Hamden; bituminous concrete, Washington Bridge over Housatonic River, approaches Rte. 1, Milford-Stratford; 2 span beam steel bridge, concrete deck, 39 ft. clear span over Wilbur Cross Parkway, macadamizing State St., North Haven; single span beam bridge, concrete abutments over RR tracks, Wilbur Cross Hy., FAP 140 J (1), Vernon.

Tex., University Park—City, 3800 University St., Dallas, 12,648 sq. yd. concrete or asphaltic concrete with concrete base and concrete curbing and gutters. Bid date changed. $460,000. CD 7/31—ENR 8/15.

Ontario—The Hydro-Electric Power Comm. of Ont., 620 University Ave., Toronto, grading and structures from Moore Lake Station to Provincial Hy. 17 near Des Joachims Rapids on Ottawa River, Township of Ralph. About $45,000. Plans deposit $25.

Iowa—State Hy. Comn., Ames, grading 4.621 mi. local road from SE corner sect. 18-75-33 north to E ¼ corner Sect. 30-76-33, Proj. S 948 (1), 2.986 mi. local road from County Trunk J, Proj. S-950 (1), both Adair Co.; 2.119 mi. local road, Proj. S-960 (1), 2.996 mi. Proj. S-1053 (1), both Cedar Co.; 1.075 mi. County Trunk Rd. T, Proj. S-177 (1), Mahaska Co.; 4.939 mi. Proj. S-1031 (1), O'Brien Co.; 4.712 mi. County Trunk Road R, Proj. S-703 (2); 3.49 mi. local road Proj. S-928 (1), both Van Buren Co.; 1.792 mi. local road, Proj. S-909 (1), Webster Co., all foregoing under

STREETS and ROADS (Low Bidders, Cont'd.)

$40,000 each; 3.379 mi. Iowa 49, Proj. FA-812 (1), Taylor Co.; 1.428 mi. Iowa 175, Proj. F-811 (4), Webster Co., both over $40,000 each; surfacing 1.99 mi. County Trunk Y, Proj. S-158 (2); 2.374 mi, Proj. S-462 (3); 3.272 mi. County Trunk Rd. K, Proj. S-859 (1); 1.69 mi. Proj. S-896 (1); 5.379 mi. County Trunk Rd. X, Proj. S-916 (1); 1.958 mi. County Trunk Rd. N, Proj. S-1027 (1), all foregoing Adams Co.; 2.538 mi. Iowa 14, Proj. F-85 (11); 4.386 mi. Iowa 14, Proj. F-85 (12) both Butler Co.; 8.968 mi. County Trunk Rd E, Proj. S-777 (1), Cass Co.; 2.996 mi. Proj. S-1053 (1) Cedar Co.; 1.075 mi. County Trunk Rd T, Proj. S-177 (1), Mahaska Co.; 5.625 mi. County Trunk Rd. K, Proj. S-1077 (1); 11.287 mi. County Trunk Rd. G, Proj. S-1078 (1), both Monona Co.; 4.939 mi. Proj. S-1031 (1), O'Brien Co.; 6.404 mi. County Trunk Rd. G, Proj. S-240 (2); 5.537 mi. County Trunk Rd. D, Proj. S-241 (2); 5.443 mi. County Trunk Rd. E, Proj. S-486 (6); 0.408 mi. County Trunk Rd. D, Proj. S-701 (2); 6.97 mi. County Trunk Rd. F, Proj. S-729 (2); 3.379 mi. Iowa 49, Proj. FA-812 (1); 7.306 mi. County Trunk Rd. U, Proj. S-858 (1); 7.604 mi. County Trunk Rd. N, Proj. S-907 (1); 10.626 mi. County Trunk Rd. B, Proj. S-908 (1); 3.712 n.i. County Trunk Rd. E, Proj. S-931 (1); 4.574 mi. County Trunk Rd. E, Proj. S-1038 (1), all foregoing Taylor Co.; 4.712 mi. County Trunk Rd. R, Proj. S-703 (2); 3.4 mi. local road, Proj. S-928 (1), both Van Buren Co.; 1.792 mi. local road Proj. S-909 (1), Webster Co., all foregoing under $40,000 each. F. R. White, Ames, ch. engr.

South Carolina—State Hy. Dpt., Columbia, grading and bituminous surfacing 13.049 mi. from St. Stephens to intersection with Route 179 near Jamestown, Route 45, Docket No. 8.263, Berkeley Co.; 4.862 mi. from intersection with Route 521 near Manning to Bloomville, Docket No. 14.213 Parts 1 & 2, F.A.S. Proj. No. S-169 (1), Clarendon Co.; 4.335 mi. from Campobello to Gowensville, Route 11, Dockets Nos. 23.258 and 42.246, Proj. S-147 (1), Parts 1, 2 & 3, Greenville and Spartanburg Counties; 6.736 mi. from Gray Court towards Princeton to Intersection with County Road near Greenville County Line, Route 101, Docket No. 30.239, F.A.S. Proj. No. S-139 (1), Parts 1 & 2, Laurens Co.; 4.602 mi. from Little Mountain towards Lake Murray to Camping Creek, Docket No. 36.225, F.A.S. Proj. No. S-211 (1) Newberry Co.; 7.986 mi. between Campobello and Chesnee by way of New Prospect, Route 11, Docket No. 42.252, F.A.S. Proj. S-147 (2), Spartanburg Co.; 3.977 mi. from intersection with Route 9 to Jonesville to intersection with Route 112, Route 115, Docket No. 44.224, F.A.S. Proj. S-100 (1), Parts 1 & 2, Union Co.

Virginia—Dpt. Hys., Richmond, W. B. macadam surfacing treatment and bridge 5.68 mi. Route 19, S.P. S-518-AS1, B1, DS1, Washington Co.; 4.3 mi. Route 260, S.P. 1169-D2, B2, M1, E, F.P. S-38-4, Shenandoah and Rockingham Counties; 4.66 mi. Route 23, S.P. S-287-M1, 138-M1, R1, Wise Co.; 3.21 mi. Route 55, S.P. SO1219-E1, B4, E2, B5, Shenandoah Co.; soil surfacing treatment 12.12 mi. and 2 bridges Route 14, S.P. 667-C, B2, 3, D1, 2, F.P. S-655 (2), Mathews and Glouchester Counties; plain concrete, W.B. macadam surface treatment and bridge N. End Brook Run Bridge 0.42 mi. Route 1 and 161, State Proj. S-575-R1, 1433-A, B1, Henrico Co.; Plans deposit $5 each.

Bids Asked August 21

Kan., Wellington—Sumner Co., Wellington, light type surfacing 5.012 mi. Proj. S-484 (1); 7.015 mi. Proj. S-485 (1); 6.495 mi. Proj. S-486 (1); 9.109 mi. Proj. 487 (1); 8.45 mi. Proj. S-488 (1).

Louisiana—State Hy. Dpt., Baton Rouge, grading drainage structures, gravel and other work in connection therewith 5.815 mi. Weston Beech Springs Hy. State Route C 2134 S.P. 713-00-23. Plans deposit $8.50 without cross section and $31 with cross section.

Miss., Jackson—City Council, pave 12 city streets.

★**New York**—Bureau Contract & Acct., Governor Alfred E. Smith State Office Bldg., Albany, gravel fdn. course 1.18 mi. Green Co., $710,000; grading and structures 0.5 mi. Nassau Co., $570,000; concrete 2.11 mi. Jefferson Co., $338,000; 3.9 mi. Cayuga Co., $382,000; top course asphalt concrete, 7.57 mi. Albany and Schenectady Counties, $1,658,000; concrete widening 4.66 mi. Nassau Co., $704,000. Adv. ENR 8/15.

Bids Asked August 23

Minnesota—State Hy. Dpt., 1246 University Ave., grading 12.6 mi. between south State line and Brownsville, SP 2802-02 (TH 26-198) F 595 (3), Plans deposit $3.80; 12.7 mi. between Hutchinson and 1 mi. south of Jct. TH 12, SP 4305-02 (TH 15-151) and SP 4706-02 (TH 15-15) F 944 (5), Plans deposit $5.95; 14.6 mi. between North Jct. TH 32 and Mahnomen, SP 5403-02 (TH 31-31) and SP 4401-03 (TH 31-31) S 256 (6), Plans deposit $4.85; 16.6 mi. between Thief River Falls and 16.6 mi. east, SP 5702-05 (TH 1-170) and SP 5702-06 (TH 1-170) S 306 (1), Plans deposit $4.70; grading, paving, asphaltic concrete surface 10.4 mi. between Royalton and Little Falls, SP 4901-06 (TH 10-27), F 154 (2) and SP 4912-04 (TH 371-27) F 264 (2), Plans deposit $3.80; bituminous wearing surface 13.7 mi. between Buhl and Hibbing and in Hibbing, SP 6935-21 (TH 169-35) and SP 6930-13 (TH 73-163), F 455 (16), Plans deposit $1.80; grading and stabilized base 0.4 mi. in Ruthton, SP 5902-10 (TH 23-88), Plans deposit $.70; gravel wearing course 16 mi. between Montevideo and east Jct. TH 40 SP 1206-13 (TH 29-38), FAP 49, (4), SP 1206-14 (TH 29-38), FAP 128 A (2) and SP 1207-08 (TH 29-38), FAP 128 B (2), Plans deposit $1.60; crushed rock subgrade stabilization 9.1 mi. between Wykoff and Preston, SP 2315-08 (TH 80-80), F 589 (2), Plans deposit 50c. O. L. Kipp, St. Paul, state hy. engr.

Minn., Austin—Mower Mo., C. M. Hubbard, aud., grading 7.5 mi. between Trunk Hy. 56 and State Aid Rd. 3, SP 50-508-02 (SAR 8), Minn. Proj. S 297 (1); grading 4.8 mi. between Browndale and Renova, SP 50-515-02 (SAR 2), Minn. Proj. S 101 (4). Over $40,000. Plans deposit $1.10 and $.90 respectively. O. L. Kipp, engr. state hy. dpt.

Minn., Rochester—State Hy. Dpt., 1246 University Ave., St. Paul, crushed rock surfacing for Maintenance Division; crush, screen load, haul about 23,200 cu. yds. crushed rock. Over $40,000. O. L. Kipp, engr. state hy.

Bids Asked August 26

Calif., Stockton—City, City Hall, imprv. Charter Way from California to El Dorado Sts., from Wilson Way to Pilgrim Sts. Plans deposit $5. L. Payton, city engr.

Minn., Ivanhoe—Lincoln Co., E. E. Swenson, aud., grading 2.2 mi. between 659 ft. south of SAR 17 and 1.5 mi. south of Tyler, SP 41-504-02 (SAR 2), Minn. Proj. 230 (1); grading 3.3 mi. between 3 mi. west of Trunk Hy. 75 and TH 75, SP 41-509-02 (SAR 6), Minn. Proj. S 660 (2). $40,000. Plans deposit $.70 and $.90 respectively. O. L. Kipp, engr., st. hy. dpt. CD 3/14/45—ENR 4/5/45.

Bids Asked August 27

Minn., Warren—Marshall Co., L. G. Johnson, aud., grading, graveling 6.5 mi. between Alma Creamery and 1.5 mi. rdy. of Middle River State Park, SP 45-509-02 (SAR 4), Minn. Proj. S 667 (2); 5.6 mi. between Trunk Hy. 32 north of Holt to Thief River, SP 45-513-02 (SAR 7), Minn. Proj. S 294 (1). Over $40,000. Plans deposit $1.60 and $.90 respectively. O. L. Kipp, engr. state hy. dpt. CD 7/24—ENR 8/1.

Wisconsin — State Hy. Comn., Madison, grade and concrete surfacing 0.083 mi. Chilton-Green Bay Rd., South City limits De Pere Rd., S. P. 2.4 (1), State Trunk Hy. 57, Brown Co.; grade, drain and temporary surfacing 2.785 mi. Westby-LaCrosse Rd., LaCrosse-Coon Valley Rd., F.A.P. F-8.2 (11), U. S. Hys. 14 and 61, Vernon Co.; grade and drain 3.192 mi. Westby-LaCrosse Rd., Coon Valley-Westby Rd., F.A.P. No. F-8.2 (12), Hys. 14 and 61, Vernon Co.; grade, drain and substructure Bridge 882 3.294 mi. Fairchild-Osseo-Durand Rd., West County Line-Eleva Rd., F.A.P. F-19.1 (25) U. S. Hy. 10, Trempealeau Co.; grade, drain and structures 9.232 mi. Bloomer-S. T. H. No. 73 Rd., Cornell-East County Line Rd., S. P. 49.0 (2), State Trunk Hy. 64, Chippewa Co.; grade, drain and bituminous surfacing 1.799 mi. Merrill-Rhinelander Rd., Parish-Jeffris Junction Rd., F.A.S. Proj. 189.0 (3), State Trunk Hy. No. 17, Langlade and Oneida Counties; grade, drain, and gravel or crushed stone surfacing 2.507 mi. Potosi-Cassville Rd., F.A.S.P. 204.0 (3), County Trunk Hy. "O", Grant Co.; gravel or crushed stone traffic bound surface course 5 mi. Plain-Sauk City Rd., F.A.S.P. S-214.0 (1), County Trunk Hy. B, Sauk Co.; Sched. Z, gravel or crushed stone traffic bound (base) course, Sched. B, gravel or crushed stone base course 4.47 mi. Lime Ridge-Ironton Rd., F.A.S.P. S-220 (1), County Trunk Hy. G, Sauk Co.; aggregate for bituminous surface course in stockpiles 6.494 mi. Somerset-Hudson-River Falls Rd., North Hudson-Somerset Rd., Fed. Proj. 399 (5), State Proj. No. 6425, State Trunk Hy. 35, St. Croix Co.

Bids Asked August 29

California — State Div. Hys., State Bldg., Los Angeles, widening, asphalt concrete, plant mix surfacing 0.6 mi. between 9 St. and Luneta Drive, Del Mar, San Diego Co. G. T. Mc Coy hy. engr.

Bids Asked September 3

Tex., Harlington — City, c/o H. Ramsey, mayor, contr. of curb, gutter and paving and storm sewers. Plans deposit. A. Tamm, Harlington, engr.

Bids Asked September 4

California — State Div. Hys., Pub. Wks. Bldg., Sacramento, grading, portland cement concrete paving 5.7 mi., 5 bridges between Rte 7 near Vacaville and 0.5 mi. north of Sweeney Creek, Solano Co.; grading, crusher run base, plant mix surfacing 1.7 mi. between Rte. 37, Auburn and Wise Canal, Placer Co. G. T. McCoy, hy. engr.

Bids Asked September 5

California — State Div. Hys., 808 State Bldg., Los Angeles, grading, paving, plant mix cement base, 5.8 mi., Ontario to Mira Loma, VIII-SBd-Riv-19 B, A, San Bernardino and Riverside Counties. G. T. McCoy, ch. engr.

†**Va., Bugg Island**—U. S. Eng., Fort Norfolk, Norfolk, access highway and Railroad construction at proposed dam site.

Bids Asked September 6

Pennsylvania—State Hy. Dpt., Harrisburg, reinforced cement concrete pavement 6,255 ft., L.R. 120 (3-D); L.R.686; T.R. U.S. 30 and 990, from 0.5 mi. southeast of N. Braddock Boro to 0.1 mi. northwest of intersection of Route 392 in Arlington Park, N. Versailles Twp., Allegheny Co.; rein.-con. pavement 28,809 ft., 5 rein.-con. bridges and exten. existing bridge and bituminous surfacing on crushed aggregate base variable in width from adjustment L.R. 149 (6-A), T.R. 422, between Robesonia Boro and Sinking Spring Boro, Heidelberg, Lower Heidelberg, South Heidelberg Twps., Robesonia, Wernersville and Sinking Spring Boros, Berks Co.; 1,284 ft., rein.-con. bridge and native stone Type B or crushed aggregate base with bituminous surfacing L.R. 178 (6), T.R. 202, Chalfont Boro, Bucks Co.; 5,328 ft., incl. 1 rein.-con. structure, native stone or crushed aggregate base with bituminous surface and one plate girder and rein.-con. I-beam bridge L.R. 53 (7), T.R. 53, from point north of Cresson Boro to point 1.33 mi. from Gallitzin, Cambria Co.; 679 ft. L.R. 639 (13), T.R. 180 and 992, Harrison City, Westmoreland Co.; bituminous surfacing existing pavement 4,893 ft., L.R. 02236 (1), on Hulton Rd., Oakmont Boro, Allegheny Co.; native stone or crushed aggregate base with bituminous surfacing and drainage 3,211 ft., L.R. 11007 (3), L.R. 11011 (3), Apple. 5802 (1), between Route 11011 Spur Menoher Hy. and Ferndale Rd., Yoder Twp., Cambria Co.; 1,235 ft., and cement rubble masonry structure L.R. 51020 (5), T.R. 390, adjacent to Promised Land Lake, Greene Twp., Pike Co.; crushed aggregate base with bituminous surfacing 1,500 ft., and I-beam bridge L.R. 30019, Bridge No. 6, T.R. 221, between Ruff Creek & Lippincott, Morgan and Washington Twps., Greene Co.; crushed aggregate base with bituminous surfacing 10,117 ft., rein.-concrete pavement, reconstructed base with bituminous surfacing, concrete deck I-beam bridge and rein.-con. structure, L.R. 158 (a-B), T.R. 29, from near Schwenksville Boro, Lower Frederick Twp. Line to Zieglersville, Montgomery Co.; cement concrete base with bituminous surfacing 2,225 ft., L.R. 20030, on Chestnut St., Meadville, Crawford Co.; plain cement concrete base with bituminous surfacing, widening existing pavement with plain cement concrete base and surfacing new base and existing surface with bituminous surfacing and constructing I-beam bridge 6,592 ft., L.R. 62180 (S-2), Smith Twp., Washington Co. Plans deposit $2.50 each. T. C. Frame, ch. engr.

★**Michigan** — State Hy. Dpt., Lansing, August 1, grading, drainage, widening, 4.515 mi. Owosso East to Kerby Rd., M-76-17 C-5 on M-21, Sheawasse Co., from Gould & Cross, R. R. 4, Grand Rapids. $160,783; 5.919 mi. east and west of Vandalia, F 14-33 C-1 on M-60, Cass Co., from Wright Contracting Co., Williamston. $408,581; 2 mi. on M-19 from So. Co. line north in Samilac Co., 1.522 mi. M-19 Yale north to Co. line, S-74-38 C-1, St. Clair & Sanilac Counties, from R. Sablain, 2835 S. Cedar Ave., Lansing, $231,541.

Missouri — State Hy. Dpt., Jefferson City, Aug. 2, imprv. 3.247 mi. Carroll Co., and 4.011 mi. Platte Co. from C. H. Atkinson Paving Co., Chillicothe, $40,628 and $63,009 respectively***imprv. 3.388 mi. Iron Co., and 4.104 mi. Madison Co., from Porter-DeWitt Constr. Co., Poplar Bluff, $64,395 and $52,393 respectively***imprv. 3.393 mi. Jefferson Co., from Sager Constr. Co., 11 Clara Ave., Webster Grove, $69,204. CD 7/24.

New York — Bureau Contracts & Acct., Governor Alfred E. mith Office Bldg., Albany, Aug. 7, imprv. 0.45 mi. Greene Co., from V. Gagliardi, Croton-on-Hudson, $129,051; imprv. 1.28 mi. Suffolk Co., from Davis Constr. Co., Hicksville, $122,041. No bids received imprv. 0.2 mi. Bronx Co.; 0.66 mi. Nassau and Suffolk Counties; 0.56 mi. Queens Co. CD 7/5—ENR 8/1.

South Carolina — State Hy. Dpt., Columbia, Aug. 1, from V. P. Loftis Co., Charlotte, N. C., imprv. 4.146 mi. Beaufort and Jasper Counties, $99,407; 8.427 mi. Dorchester Co., $183,565; 4.863 mi. Jasper Co., $69,575; 6.128 mi. Colleton Co., $152,837***from Boyle Constr. Co., Sumter, imprv. 9.128 mi. Chesterfield Co., $237,987; 6.231 mi. Lee Co., $110,067; 5.158 mi. Kershaw Co., $136,403; 12.045 mi. Sumter Co., $173,194***from Robert Lee, Inc., Manning, imprv. 4.939 mi. Dorchester Co., $165,662; imprv. 8.165 mi. Williamsburg Co., $220,409*** from Hubbard Constr. Vo., Marion, imprv. 12.246 mi. Dillon and Marion Counties, $241,-301; imprv. 6.17 mi. Chesterfield and Darlington Counties, $120,018***from Cherokee, Inc., Columbia, imprv. 8.359 mi. Orangeburg Co., $129,370***from E. H. Hines Constr. Co., Greenwood, imprv. 4.95 mi. Pickens Co., $101,-814***from Sloan Constr. Co., Inc., Greenville, imprv. 6.274 mi. Greenville Co., $98,236*** from MacDougald Constr. Co., Northside Dr. N.W., Atlanta, Ga., imprv. 8.258 mi. Georgetown and Williamsburg Counties, $187,637*** from Locke Constr. Co., Inc., Little Mountain, imprv. 8.331 mi. Abbeville and Greenwood Counties, $149,122. No bids received imprv. 5.385 mi. York Co. CD 7/17—ENR 7/25.

Tex., Brownfield — Terry Co., H. R. Winston, judge, Courthouse Bldg., July 22, imprv. 27.432 mi. Terry Co. from Ted Smity, Sweetwater. $171,952. Est. $225,000. CD 7/12.

Tex., Houston—Harris Co., c/o H. L. Washburn, auditor, imprv. 4.48 mi. Waller-Tomball Rd. Harris Co. from Brown & Root, P. O. Box 3. $150,842. Est. $130,776. CD 7/31.

STREETS and ROADS (Low Bidders, Cont'd.)

Tex., Teague — J. S. Erwin, mayor, City Hall, rejected bids 8/1, imprv. streets, curbs and gutters. L. B. **$93,129.** CD 7/3—ENR 7/11.

LOW BIDDERS

California—State Div. Hys., Sacramento, July 31, imprv. 2.9 mi. San Mateo Co., from Piombo Bros. & Co., 1571 Turk St., San Francisco. **$185,266.** CD 7/8—ENR 7/11.

California—State Div. Hys., Pub. Wks. Bldg., Sacramento, rejected July 17 bids, imprv. 2.7 mi. Del Norte Co., L.B. **$44,616.** CD 7/22—ENR 7/25, under LB.

Calif., Redwood City—San Mateo Co., Court House, August 6, grading, paving, curbs, gutters, sidewalks, sanitary sewers, storm drains, Millwood sub-division, Spec. 2145, from Keeble & Brown, Rte. 4, Box 64, Tully Rd., San Jose. **$80,250.** CD 7/25.

Calif., Redwood City — City, City Hall, August 5, imprv. Hudson and Grand Sts., Lincoln Ave., etc., from California Paving Co., 1406 3 Ave., San Mateo. **$62,652.** CD 7/23.

D. C., Wash.—District Comrs., District Bldg., July 26, imprv. roadway of Mt. Olivet Rd. N.E., from New York Ave. to Bladensburg Rd., from Wilmoth Paving Co., 1st and P Sts. S.E., **$131,478.**

D. C., Wash.—District Comrs., District Bldg., July 29, imprv. K St. N.W., from Rock Creek to Key Bridge, from Corson & Gruman Co., 33 and K Sts. N.W., **$41,494**; imprv. West Virginia Ave., from Mt. Olivet Rd. to New York Ave., from Highway Constr. Co., P.O. Box 4437, Wash., Zone 17. **$81,946.** CD 7/25.

D. C., Wash.—District Comrs., District Bldg., July 25, 30,000 sq. yd. concrete alley pavements or alternate, from Haines Constr. Co., Colmar Manor, Md. **$66,858.**

★**Florida**—State Rd. Dpt., Tallahassee, Aug. 1, imprv. 1.349 mi. Duval Co. and 9.57 mi. Nassau Co., from Duval Engr. & Contr. Co., foot E. Adams St., Jacksonville, **$363,733** and **$130,199** respectively***3.061 mi. Dade Co., from Belcher Oil Co., 1221 Biscayne Blvd., Miami, **$56,096***2.443 mi. Palm Beach Co., from Brinson Const. Co., 1st Natl. Bank Bldg., Tampa, **$48,072***5.798 mi. Brevard Co., from J. A. Benton, St. Petersburg, **$73,916***10.359 mi. Marion Co., from John C. Dickerson Const. Co., Lakeland, **$71,001.** CD 7/15—ENR 7/18.

Georgia — State Hy. Dpt., Atlanta, Aug. 2, imprv. 7.853 mi. Clay Co., from Cecil H. Dunn Constr. Co., Moultrie, **$90,242***imprv. 2.039 mi. Randolph Co., from C. H. Wheatley, Americus, **$42,756***imprv. 6.750 mi. Banks Co., from W. L. Cobb, Inc., Decatur, **$211,480***imprv. 11.267 mi. Murray Co., from Ledbetter-Johnson, Rome, **$212,552***imprv. 3.593 mi. Irwin Co., from Crummey & Crummey, Rochelle, **$67,959***imprv. 12.603 mi. Upson Co., from Wright Contgr. Co., 504-25 Ave., Columbus, **$291,900***imprv. 8.362 mi. Walker Co., from W. C. Shepherd Co. Inc., 2450 Briarcliff Rd. NE, Atlanta, **$83,584***imprv. 2 mi. Talbot Co., from M. R. Woodall Co., Inc., 1594 Lakewood St. SE, Atlanta, **$47,931***imprv. 14.156 mi. Habersham and White Counties, from C. L. Lyle Constr. Co., Gainesville, **$288,723***imprv. 9.261 mi. Taylor Co., from Christain & Bell, 664 Spring St., Atlanta, **$186,952***imprv. 5 mi. Greene Co., from E. H. Hines Constr. Co., Greenwood, **$68,810***imprv. 5.068 mi. Tallaferro Co., from H. Brown, Milledgeville, **$161,485***imprv. 8.282 mi. Putnam and Hancock Counties, from Brooks Constr. Co., Atlanta, **$230,246.** Proposal not opened imprv. 0.642 mi. Jones Co. Will readvertise. CD 7/24.

Ill., Berwyn — City, City Hall, imprv. 0.6228 mi. Cook Co., from P. J. Crowley Co., Box 144, Maywood, Ill. **$99,778.** CD 7/24.

Ill., La Salle—City, July 29, paving E. Walnut St. from Portland Ave. to new North east entrance hy., from Trompeter Const. Co., 2424 4 St., Peru. **$43,157.** Est. **$37,000.**

★**Indiana** — State Hy. Comn., J. H. Lauer, chrmn., Indianapolis, August 6, imprv. 4.207 mi. Wabash Co., from Bontrager Constr. Co., Indiana Ave., Elkhart, **$304,793**; 7.17 mi. Allen, Noble & DeKalb Counties, from McMahan Constr. Co., Rochester, **$319,791**; 2.499 mi., Pike and Dubois Counties, from R. P. Olinger, Huntingburg, **$296,119.** CD 7/22—ENR 7/25.

Kentucky — State Dpt. Hys., Frankfort, Aug. 2, imprv. 8.338 mi. Caldwell Co., from S. J. Boone, Owensboro. **$219,254.** CD 7/17—ENR 7/25.

Louisiana — State Hy. Dpt., Baton Rouge, July 31, imprv. 22.05 mi. Dixie Inn-Cotton Valley and Sarepta-Arkansas Line Hys; 31.462 mi. Bernice-Sterlington Hy. from Horton Pollard, Box 127, Bossier City, **$58,253** and **$47,374** respectively***imprv. 6.30 mi. Ruby-Pineville Hy.; 12.1 mi. Marksville-Red River School Lond Lake Hys. from W. R. Aldrich & Co., Box 1751, Baton Rouge, **$74,894** and **$59,136** respectively. CD 7/18—ENR 7/25.

★**Michigan**—State Hy. Dpt., Lansing, July 25, imprv. 8.247 mi. Projects M-76-18C-2, M-76-9C-6, M-76-17C-6, Shiawassee Co., from Wright Contg. Co., Williamston. **$121,094***9.107 mi. Project S-B2 of 47-2-13C-1; SB 1 of 47-2-13C-1 Livingston Co., from the Fitch-Eva Co., Howell. **$65,648***6.698 mi. Proj. S-47-17C-1, Lake Co., from C. M. Loomis, 415 Murray Bldg., Grand Rapids. **$71,938***8.822 mi. Proj. S-54-23C-4, S-67-29C-8 on M-66, Mecosta and Osceola Counties, from W. Pierson, 2236 Delaware Blvd., Saginaw, **$120,113***5.687 mi. Proj. S-65-16C-1 on M-33, Ogemaw Co., from Johnson-Greene Co., Ann Arbor, **$217,779.**

Minnesota—State Hy. Dpt., St. Paul, rejected bids June 28, imprv. 5.2 mi. SP 3010-02 (TH 107-5) and SP 3311-02 (TH 107-5) FAP 220 (5) and 918 A (1), LB. **$145,439**; 10.7 mi. SP 3311-04 (TH 107-134) and SP 5812-02 (TH 107-134) F 918 (3), LB. **$326,706.** CD 6/13—

Missouri—State Hy. Comn., Jefferson City, no Aug. 2 bids received. imprv. 0.091 mi.; 0.341 mi. Pemiscot Co.; 2.576 mi., Stoddard Co.; 2.187 mi.; 1.834 mi. Polk Co.; 2.691 mi. Hickory Co.; 2.342 mi.; 2.495 mi., Laclede Co.; 2.496 mi.; 3.384.; 0.241 mi. Stone Co.; 3.409 mi.; 3.317 mi.; 3.210 mi. Dunklin Co.; 3.066 mi.; 2.724 mi. Lewis Co.; 2.154 mi. Chariton Co.; 2.705 mi. Morgan Co.; 3.343 mi. Christian Co.; 4.276 mi.; 3.683 mi.; 0.403 mi. Miller Co.; 3.934 mi.; 1.417 mi. Shelby Co. C. W. Brown, ch. engr. CD 7/24.

Montana—State Hy. Comn., Helena, July 24, imprv. 7.5 mi. Custer Co., from Inland Constr. Co., 3867 Leavenworth, Omaha, Neb. **$267,650.** Est. $247,000. CD 7/1—ENR 7/11.

★**†Oregon**—Pub. Roads Admin., Bedell Bldg., Portland, Aug. 1, imprv. 3.9 mi. and 1 mi. Marion Co., from Kuckenberg Constr. Co., 11104 N.E. Homan St., Portland, **$603,489** and **$586,346** respectively***imprv. 1.8 mi. and 2.8 mi. Marion Co., all North Santiam Hy. relocation proj., from Guy F. Atkinson Co., Porter Bldg., Portland, **$893,591** and **$468,073** respectively. CD 7/22—ENR 7/25.

★**Pennsylvania**—State Hy. Dpt., Harrisburg, Aug. 2, imprv. 4.48 mi. Cambria Co., from L. R. Owen & Co., Johnstown, **$336,924***imprv. 1.27 mi. Cambria Co., from The Mitana Co., Carnegie, **$227,479***imprv. 0.28 mi. Chester and Lancaster Counties, from J. D. Eckman, Inc., Glen, **$85,271***imprv. 2.45 mi. Montgomery Co., to J. H. Swanger, Lancaster, **$383,730***imprv. 2.34 mi. Northumberland Co., from A. W. Hinaman, Williamsport, **$163,032.** CD 7/10—ENR 7/18.

Pennsylvania—State Hy. Dpt., Harrisburg, rejected July 12 bids, imprv. 9,921 ft., Armstrong Co. L.B. **$431,303.** Will readvertise. CD 7/17—ENR 7/25, under LB.

★**Pennsylvania**—State Hy. Dpt., Harrisburg, rejected July 26 bids, imprv. 28,809 ft., Berks Co. L.B. **$970,204**; imprv. 1,284 ft., Bucks Co. L.B. **$120,850**; imprv. 5,328 ft., Cambria Co. L.B. **$291,250**; imprv. 10,117 ft., Montgomery Co. L.B. **$456,728**; 1,235 ft., Pike Co. L.B. **$43,152.** Will readvertise. CD 7/30—ENR 8/1, under LB.

★**Texas**—State Hy., Comn., Austin, rejected bids July 23, imprv. 12.243 mi. Angelina Co., L.B. **$336,608**; 2.787 and 4.99 mi. Liberty Co., **$86,247** L.B.; 9.84 mi. Harris Co., LB. **$155,477**; roads, Wichita Co., L.B. **$46,044**; 7.204 mi. Jefferson Co., L.B. **$389,227.** CD 7/26—ENR 8/1.

Texas—State Hy. Comn., Austin, July 24, rejected imprv. 0.734 mi. Childress Co. L.B. **$58,769**; 11.811 mi. Jack Co., L.B. **$152,531**; 8.141 mi. Matagorda Co., L.B. **$99,669**; 8.506 mi. Robertson Co., L.B. **$77,374.** CD 7/29—ENR 8/1, under LB.

Tex., Plains—Yoakum Co., G. P. Beene, judge, Plains, July 30, constructing 64 mi. grading, drainage structures, flexible base and asphalt surfacing from W. O. Pelphrey, Wichita Falls, **$461,995.** CD 7/22.

Tex., Winnsboro—City, J. E. Old, mayor, July 26, asphalt street paving, from O'Neal Constr. Co., 901 S. Austin St., Dallas. **$62,606.** Est. $90,000. CD 7/16.

Washington—State Hy. Dpt., Olympia, July 30, imprv. 2.549 mi. Lincoln and Spokane Counties, from Charles A. Power, E. 915 Marieta St., Spokane, **$155,193**; 1.498 mi. King Co., from R. L. Moss & Co., Zenith, **$216,558.** CD 7/17—ENR 7/25.

Wisconsin—State Hy. Comm., Madison, rejected bids for imprv. 2.234 mi. roads in Dunn Co. **$252,333**, under L.B. CD 8/2—ENR 8/8.

CONTRACTS AWARDED

Calif., Redwood City — City, City Hall, imprv. Quartz, Ruby, Sapphire, Topaz Sts., Madison Ave., etc., to Union Paving Co., 212 Babcock Bldg., San Francisco. **$81,300.**

Calif. South San Francisco — City, City Hall, curbs, gutters, sidewalks, storm and sanitary sewers, etc., Brentford sub-division 2, to Union Paving Co., 212 Babcock Bldg., San Francisco. **$123,584.** CD 7/23.

Ill., Edwardsville — City, E. H. Poos, city clk., widening, grading paving, curbing, etc., about, 1.01 mi. of North Main Street to Edwardsville Constr. Co., Bank of Edwardsville, Bldg. **$163,000.**

Ia., Ottumwa — City, F. Gibbons, city clk., grading, paving, curbing, guttering, etc. on 26 blocks city streets to J. C. Blunk Constr. Co., Ottumwa. **$112,740.** Est. $109,225. Amiel Richtein, city engr., City Hall.

Ia., Ottumwa—City, F. Gibbons, clk., City Hall, paving, to J. C. Blunk Constr. Co., Ottumwa, **$112,739.** A. Reichtein, city engr. Bids 7/18. CD 6/27—ENR 7/4.

Ia., Wall Lake—City, E. H. Herrig, clk., City Hall, grading, curbing, guttering, storm sewers, paving, to Moran Constr. Co., 2129 S. 56 St., Omaha, Neb., **$47,806.** Buell & Winter, Sioux City, engrs. Bids 7/15.

Mich., Detroit—Wayne County Road Comm., 3800 Barium Tower, repaving section Middlebelt Rd., constructing parking facilities, to Cook Constr. Co., 2401 Barium Tower. **$49,143.**

★**Mississippi**—State Hy. Comn., Jackson, imprv. 2.6 mi. Harrison Co., to Stevens Bros. & The Miller Hutchinson Co., 730 Gravier St., New Orleans, La., **$514,016.** CD 7/29—ENR 8/1, under LB.; imprv. 9.6 mi. Bolivar Co., to Delta Paving Co., Jackson. **$159,904.** CD 7/15. Bids 7/23.

Montana—State Hy. Comm., Helena, imprv. 2.3 Silver Bow Co., to S. Birch & Sons Constr. Co., Ford Bldg., Great Falls. **$62,649.** Bids 7/24. Est. $65,000. CD 7/1—ENR 7/11.

Nev., Reno—City, City Hall, July 29, paving 732,502 sq. ft. and 9,393 ft. of curbs and gutters to Isbell Constr. Co., 1300 E. 4 St., **$187,353.** E. C. Frisch, city engr. CD 7/19.

★**Oklahoma**—State Hy. Dpt., Oklahoma City, imprv. 4.99 mi. Bryan Co., to J. A. Briscoe, Stillwater, **$312,269**, est. $320,554*** 4.89 mi. Marshall Co. to Myron Groseclose, 4000 N.W. 39 St., Oklahoma City, **$64,067**, est. $70,367***3.3 mi. and 5.8 mi. Craig Co., to Plains Constr. Co., 407 Tradesmens Bldg., **$60,105**, est. $65,021; and **$121,798**, est. $121,809 respectively***6.38 mi. Pottowatomie Co., to E. A. Richards, 1401 N.W. 5 St., Oklahoma City, **$50,310**, est. $67,105***3.0 mi. Payne Co., and 0.85 mi. Pushmataha Co.; to Henryetta Constr. Co., Henryette, **$73,462**, and **$43,170** respectively, est. $92,695 and $43,421 respectively***7.48 mi. Grady Co., and 6.892 mi. Atoka Co., to Smith Bros. Co., Noble. **$126,978** and **$45,750** respectively, est. $140,579 and $45,593 respectively***7.19 mi. Oklahoma Co., to W. E. Steelman, 2800 N.E. 4 St., **$58,791**, est. $59,762***3.3 mi. Pottawatomis Co., to G. E. Keck, Inc., Fairview, **$103,771**, est. $126,131***farm to market road, Payne Co., to Moore Bros., Inc., Ada, **$53,846**, est. $56,155***Rejected bids imprv. 3.0 mi. Grant Co., $16,500 awarded 8/1. H. E. Bailey, engr. CD 7/24.

Oklahoma — Hy. Dpt., Capitol, O. C., 3.125 mi. grading, drainage and gravel base course on U. S. 70, Fort Towson, to Auris Constr. Co., 1647 Exchange, Okla., City, **$93,957**, Est. $83,236***8.0 mi. grading drainage traffic bound surfacing and one bridge on a farm to market road north of Walters to G & M Constr. Co., Walters, **$43,800.** Est. $51,200. Awarded 8/1. H. E. Bailey, Capitol, O. C., engr.

Utah—State Rd. Comm., State Capitol, Salt Lake City, concrete, plant mix bituminous surfaced roadway, 5.266 mi. between Willard and Brigham City, Proj. F-126 (5) Box Elder Co., to W. W. Clyde & Co., Springville, **$147,259.** Bids 7/29. R. W. McLeese, St. Rd. Engr. CD 7/22.

Va., Radford — American Viscose Corp., Gimbel Bldg., Phila., Pa., grading and paving, to Luck Constr. Co., Rothesay Rd., Richmond, over **$40,000.** Awarded 7/31.

Wisconsin—State Hy. Comm., Madison, imprv. 3.795 mi. road in Waushara Co., to Kramp Constr. Co., 2775 S. 27 St., Milwaukee, **$142,849.** CD 7/11—ENR 7/18, under LB.

Wis., Milwaukee — City, City Hall, paving N. 35 St., to Badger Constr. Co., 229 E. Wisconsin Ave., Zone 2. **$40,769.** Awarded 8/5. Bids 8/2.

Wis., Milwaukee—City, City Hall, paving streets and alleys, N. 39 St., to N. Harris, 910 E. Wisconsin Ave., Zone 2, **$48,859.** CD 12/2/43—ENR 12/9/43.

Wis., Racine—City, H. A. Nelson, comr., City Hall, paving alleys, to R. R. Birdsall & Sons, Racine, **$52,638.** Wm. J. Chadwick, City engr. Bids 7/24.

N. B., St. Stephen—Municipality, permanent paving, to Costal Asphalt Products Ltd., 21 Rothesay Ave., St. John. Est. **$65,000.** CD 5/24.

Ontario — Dpt. Hys., Toronto, 4.36 mi. concrete pavement from Highland Crek to Pickering, to Curran & Briggs, Ltd., 61 Haverson Blvd., Toronto, about **$175,000.** Bids 6/18. CD 6/7—ENR 6/13.

Ont., Toronto—City, asphaltic concrete paving, Beverley St. from Queen to College Sts., to Kilmer Van Nostrand & Co., 315 Eglinton Ave. W., **$115,658**, CD 2/28; Jarvis St from Quebec to Bloor Sts., to Rayner Const. Co. Ltd., 29 Commercial St., Leaside, **$224,630.**

★**Quebec**—Dpt. Roads, Quebec, concrete pavement Hy. 9, Sir Wilfrid Laurier Hy., 12 mi. from Drummondville to Ste. Helene, Drummondville, to Armand Scotte et Fils, 1906 Van Horne Ave., Montreal, **$200,000**; grading, graveling approx. 4 mi. at St. Augustine in Two Mountains Co., St. Augustine, to H. J. O'Connell, Ltd., Canada Cement Bldg., Montreal, about **$375,000.** E. Gohier, c/o owners, engr.

EARTHWORK, WATERWAYS

BIDS ASKED

Bids Asked August 19

Missouri—U. S. Eng., 601 Davidson Bldg., 10 East 17 St., Kansas City, 8, Mo., about 4,550 lin. ft. revetment in or immediately adjacent to the Missouri River at South Point Reach to Amazon Bond under the project Maintenance and Improvment of existing River and Harbor works Missouri River, Kansas City, to mouth, Serial No. 23-082-47-21.

O., Cleveland—Bd. Comrs., Cuyahoga Co., F. J. Husak, clk., New Court House, reopening River Rd. for traffic work, incl. relocating Chagrin River, approx. 3,000 ft. river channel, at Hunting Valley. $133,500. J. O. McWilliams, Standard Bank Bldg., co. engr.

Que., Grand River—Dominion Govt., D. B. Finn, deputy minister Dpt. Fisheries, Ottawa, Ont., concrete seawall. $45,000.

Bids Asked August 20

Ga., Augusta—City, c/o City Council, paving 7 streets. Plans deposit $10.

Ill., McHenry—McHenry Co., C. L. Tryon, supt. Court House Woodstock, imprv. roads in Richmond, Alden, Burton, Coral, Dorr, Greenwood, Hartland, Merengom, McHenry, Riley, Seneca, Dunham, Grafton Twps.

Ohio—State Hy. Dpt., P. T. Ford, dir., State Office Bldg., Columbus, imprv. Cleveland section of Painesville Euclid Rd., State Hy. 520, Cuyahoga Co. $47,700.

★**Ohio**—State Dpt. Hys. P. T. Ford, dir. of Hys State Office Bldg., Columbus, grading, drainage, paving, bridges and culverts, Lakeland Dr., Sect. 1 and 2, Cleveland and Bratenwahl, Cuyahoga Co., Est. over $2,000,000. CD 8/24—ENR 9/6/45.

Bids Asked August 21

N. S., Dingwall—Secy. Dpt. P. Wks., Ottawa, Ont., harbor imprvs. about $300,000. Plans deposit $50. R. Blais, c/o owners, engr. CD 4/5—ENR 4/18.

N. S., Picton Island—Secy. Dpt. P. Wks., Ottawa, Ont., breakwater-wharf replacement. $75,000. Plans deposit $20. R. Blais, c/o owner, engr. CD 5/28—ENR 5/30.

Bids Asked August 22

California—State Div. Water Resources, 803 State Bldg., Los Angeles, bank protection in San Juan Creek, Doheny Beach State Park, incl. excav., fill, timber and sheet timber piling, slope paving, etc., Orange Co. Over $40,000. E. Hyatt, state engr.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, 6 ft. by 9 ft. slide gates at Santa Fe Dam, Los Angeles Co., Serial 04-353-47-4. Extended date. CD 7/17—ENR 7/25.

†Missouri—U. S. Eng., P.O. Box 97, Memphis 1, Tenn., constructing 2 drainage structures in Elk Chute Drainage Dist., Ser. No. 40-041-47-24.

Bids Asked August 23

California—State Div. Water Resources, Pub. Wks. Bldg., Sacramento, repairing Tule Lake Dam and Diversion works, Lassen Co. E Hyatt, state engr.

Bids Asked August 26

†Colo., Denver—Bureau Reclamation, crest railings with lighting for Grand Coulee Dam, Columbia Basin Proj., Spec. 1419. Extended date. CD 7/3—ENR 7/11.

†Mississippi and Louisiana—U. S. Eng., P. O. Box 1169, Mobile, Ala., constructing locks 1, 2 and 3, near Pearl River between Bogaloosa and Pearl River, La., Inv. No. 01-076-67-1. Extended date. CD 7/3.

†West Virginia—U. S. Eng., Huntington, Zone 18, clearing to elevation 1400, Bluestone Reservoir Proj., New River. Ser. No. 46-022-47-26.

Bids Asked August 27

†Tex., Port Isabel—U. S. Eng., 606 Santa Fe Bldg., Galveston, dredging Pt. Isabel turning basin-Brazos Island Harbor, Inv. 41-243-47-26. $127,000. CD 1/10/44—ENR 1/27/44.

†West Virginia—U. S. Eng., Huntington, dredging below lock and dam No. 18 and at Newberry Island, Ohio River, Ser. No. 46-022-47-23.

Bids Asked August 29

†Missouri—U. S. Eng., P. O. Box 97, Memphis, 1, Tenn., constructing approx. 875,000 cu. yd. earthwork in Elk Chute Drainage Dist., St. Francis Basin Proj., Ser. No. 40-041-47-22.

†New Jersey—U. S. Eng., 1400 Penn Mutual Bldg., Phila., 1, Pa., maintenance dredging in Raccoon Creek, Inv. 36-109-47-7, extending upstream from 7 ft. curve depth near Molonox Shoal to vicinity Main St. Bridge, Swedesboro.

Bids Asked September 3

†Texas—U. S. Eng., 606 Sante Fe Bldg., Galveston, dredging the Gulf Intracoastal Waterway between Matagorda Bay and Arkansas Bay, in Calhoun and Arkansas Counties. Inv. No. 41-243-47-29.

Bids Asked September 4

†Nebraska—Bureau Reclamation, McCook, Enders Dam, dike, and relocation State Hy. 61, Frenchman Creek unit, 2¾ mi. south of Enders. CD 7/9—ENR 7/18.

†Oregon—U. S. Eng., 628 Pittock Block, Portland, Zone 5, constructing Dorena Dam and Spillway, involving 472,000 cu. yd. common, solid rock and channel excav., 2,932,500 cu. yd. embankment, 4,000,000 cu. yd. borrow excav., 1,375,000 lb. steel, reinforcement, etc., Plans deposit $25.

Bids Asked September 5

†Washington—Bureau of Reclamation, Custom House, Denver, Zone 2, electric freight elevator for block 64, Grand Coulee Dam, Spec. 1462.

Bids Asked September 9

†Washington—Bureau of Reclamation, Custom House Denver, 2, July 30, for furnishing, delivering fob cars at the shipping point or fob cars at Pasco, Wash., 7 motor-driven, vertical-shaft pumping units, for installation in 6 relift pumping plants, Pasco Lateral sys., Columbia Basin Proj., Spec. 1461.

†Wyoming—Bureau of Reclamation, Custom House, Denver, Zone 2, furnishing delivering transformers fob cars at the shipping point or fob cars at Medicine Bow, and Hanna, Wyoming, Spec. 1455.

Bids Asked September 10

Ill., East St. Louis—East Side Levee & Sanitary Dist., D. Foley, pres., 628A Missouri Ave., constructing Proj. 14 (Sect. 1) new Lansdowne storm water channel, incidental pipe drains and head wall structures from junction with Cahokia Channel (Proj. 11-C) eastwardly and southerly to north right-of-way line of Pennsylvania Railroad immediately south of Illinois State Hy. 11, St. Clair Co. Plans deposit $10. S. Kernan, ch. engr. CD 8/7/44—ENR 8/24/44.

Bids Asked September 12

†Colorado—Bureau of Reclamation, Custom House, Denver, one oil purifier, furnishing, delivering fob cars at the shipping point or fob cars at Odair, for the Grand Coulee Power plant, Columbia Basin Proj. Spec. No. 1467.

LOW BIDDERS

†Arkansas—U. S. Eng., 300 Broadway, Little Rock, July 29, compacted levee embankment and drainage structures, Arkansas River, near Morrilton, Sect. 1, from Delta Constr. Co., Tulsa, Okla., **$104,731**; Sect. 2, from C. J. List Constr. Co., Ry. Exchange Bldg., Kansas City, Mo., **$139,403.** CD 7/17.

★**†Colorado**—Bureau Reclamation, Custom house, Denver, rejected bids May 28, constructing Granby Pump. plant, Colorado-Big Thompson Proj., Spec. 1243. L.B. **$3,329,994.** CD 4/12—ENR 6/20, under LB.

Illinois—Illinois Div. Waterways, 201 W. Monroe St., Springfield, August 6, Spoon Creek imprvts., Franklin & Williamson Counties, from S. W. Hardwick Co., First State Bank, Beardstown. **$24,741.** CD 8/1.

†Illinois—U. S. Eng., U. S. Court House & Custom House, St. Louis, 1, Mo., August 1, 665,000 cu. yds. earthen levees item 11a from Joseph L. Pohl and Eugene Lohr, Nevada, Mo., **$301,668**; 610,000 cu. yds. earthen levees item 11c from Hart & Hart, Providence, Ky., **$229,555.** Both in Harrisonville & Ivy Landing Drainage and Levee Dist., Monroe Co.

†Illinois—U. S. Eng., 800 U. S. Court House and Custom House, 1114 Market St., St. Louis, 1, Mo., July 29, 4 gravity drainage structures in the levees of the Clear Creek Drainage and Levee Dist., Union and Alexander Counties, from Sager Constr. Co., 5507 Pershing Ave., St. Louis, 12, Mo., **$60,283,** CD 7/2.

†Kentucky—U. S. Eng., P. O. Box 97, Memphis, 1, Tenn., cancelled bids to have been opened Aug. 8, approx. 50,000 sq. articulated concrete mattress cast on Hickman, Kentucky Casting Field, Inv. Ser. No. 40-041-47-12. CD 7/30—ENR 8/1.

★**†Louisiana**—U. S. Eng., foot of Prytania St., New Orleans, July 30, West Calumet Floodgate on the west bank of Wax Lake Outlet, from Forcum-James Co., Dyersburg, Tenn., **$558,478.** CD 7/24.

†Missouri—U. S. Eng., 800 U. S. Courthouse and Customhouse, St. Louis, Zone 1, Mo., July 31, standard bank protection or timber piling clump dikes or both, from Hough-Cowger & Co., 320 North Fourth St., St. Louis Zone 2, Mo., Dogtooth Bend, **$77,192**; Cape Girardeau, Wilkinson & Danby Landing, **$113,031**; Chester, **$82,735**; Ste. Genevieve, **$224,578.** CD 7/24.

★**N. Y., Herkimer**—Bureau Contrs. & Accounts, State Office Bldg., Albany, rejected bids July 17, guard gates, spillways, etc. Contr. U. S. 37, L. B. **$929,289.** CD 7/19—ENR 7/25, under LB.

†Oregon—U. S. Eng., Pittock Block, Portland, Aug. 5, 1,000 ft. pile dike on Willamette River at Wheatland Bar, from Gilpin Constr. Co., 4850 N.W. Front St., Portland. **$29,295.**

★**†South Carolina**—U. S. Eng., Custom House, Charleston, July 30, maintenance dredging, 35 ft. Cooper River and Town Creek channels, Spec. 38-081-47-2, from The Arundel Corp., Elkton, Wilmington, Del. **$546,809.** CD 7/23.

CONTRACTS AWARDED

Ala., Birmingham—Tennessee Coal, Iron & Railroad Co., Brown Marx Bldg., ore reclaiming tunnels, main tunnel 220 ft. long and cross tunnel 180 ft. long, to Rust Engr. Co., Natl. Life Bldg., Est. **$200,000.**

†Arkansas—U. S. Eng., P. O. Box 97, Memphis, Tenn., placing 50,000 cu.yd. earthwork in the Lower St. Francis Levee Dist. Serial No. 40-041-46-109, to Lee Knox Constr. Co., Jefferson City, Mo., **$27,750.** CD 6/25—ENR 6/27.

★**†Washington**—Bureau Reclamation, Customhouse, Denver, 2 Colo., 12 pump discharge pipes at Grand Coulee Dam, Spec. 1339, to Western Pipe & Steel Corp. 200 Bush St., San Francisco, Calif., **$1,208,000.** Bids 6/28. CD 7/9—ENR 7/18, under LB.

†Wash., Odair—Bureau Reclamation, Customhouse, Denver 2, Colo., elevators for Grand Coulee Dam, Columbia Basin Proj., to Otis Elevator Co., 1 Beach, San Francisco, Calif. $163,636. W. R. Young, ch. engr.

Wash., Wapato—Union Gap Irrig. Dist., Wapato, 7,500 ft. 36- to 64-in. rein.-con. pipe for main canal imprv., to Yakima Cement Products Co., Yakima. **$60,955.** Est. $22,500. CD 7/16—ENR.

AIRPORTS & AIRBASES

BIDS ASKED

Bids Asked August 17

Ont., Ottawa—Secretary Dpt. Reconst. & Supply, Ottawa, replacing asphalt surface at R.C.A.F. station with concrete (runways, taxi-strips, etc.) About $125,000.

Bids Asked August 20

Mass., East Boston—TAXIWAY—Commonwealth of Massachusetts, Dpt. P. Wks., 100 Nashua St., Boston, east bulkhead taxiway, taxiway "C", taxiway fingers and miscellaneous construction, General Logan Airport.

Minn., Minneapolis—HANGARS—Minneapolis-St. Paul Metropolitan Airports Comm. R. Aldrich, 2429 University Ave., St. Paul, move 2 hangers at U. S. Naval Air Station, Wold-Chamberlain airport, to new location, new fdns., connections to Administration bldg., remodeling of hangers, removing, constr. new roads, walks, curbs, etc., storm sewer sys. etc. over $55,000. Plans deposit $10. Magney, Tusler & Setter, 202 Foshay Tower, archts. CD 5/23—ENR 5/30.

†Neb., Beatrice—AIRPORT CONSTRUCTION—Civil Aeronautics Auth., Municipal Airport, Kansas City, Mo., airport construction, incl. fencing, seeding, three 14 ft. gates, fertilizing, 17,215 ft. trenching, 20,525 ft. power cable, 44 boundary lights, 18 range lights, 19 obstruction light poles, painting, markers, transformer vault, erecting 51 ft. beacon tower and 36 in. beacon.

Bids Asked August 23

†Wash., Hoquiam—RUNWAY PAVEMENT REPAIRS—Civil Aeronautics Admin., Smith Tower Annex, Seattle, Zone 4, repair runway pavement at Moon Island Airport.

Bids Asked August 28

O., Akron—AIRPORT BLDG.—Trustees, Akron-Canton Massillon Airport, c/o Comrs., Summit Co., Akron, structural steel work on foundations of Akron-Canton-Massillon Airport terminal bldg. Plans deposit $10. M. M. Konarski, 711 United Bldg., archts., F. W. Stafford, 711 United Bldg., engr. CD 7/31—ENR 8/8.

Bids Asked

Texas—OIL PIPELINES—Bell Oil & Gas Co., Burkburnett crude oilpipe line gathering sys. imprvs., extens. $65,000. CD 6/14—ENR 6/27.

LOW BIDDERS

★**N. Y., Idlewild**—RUNWAY PAVING—Comr. Marine & Aviation, Pier A foot of Battery Pl., North River, New York, Aug. 1, paving runways D, E and F at airport, Contr. 35, from Gull Contg. Co., and L. G. DeFelice & Son, 518 Porter Ave., Brooklyn, 22, **$2,661,696.** Downer, Green & Carrillo, 30 Rockefeller Plaza, New York, zone 20, engrs. CD 7/24—ENR 8/1.

CONTRACTS AWARDED

Calif., Burbank—STORAGE SHED—Pacific Airmotive Corp., 6265 San Fernando Rd., Glendale, 200x250 ft., rigid steel frame storage shed, to Winona Way and Hollywood Way, to Buttress & McClellan, 1013 E. 8 St., Los Angeles, approx. $75,000. CD 6/25—ENR 7/4.

Ga., Hapeville—AIRPORT BLDGS.—Delta Air Lines, Municipal Airport, Atlanta, design and construction, addns., to present bldg., to The Austin Co., 16112 Euclid Ave., Cleveland, O. **$132,000.**

UNCLASSIFIED (Contracts Awarded, Cont.)

Mass., East Boston—SERVICE HANGER—American Air Lines, General Logan Airport, East Boston, service hanger, Logan Airport to Laurie Engrg. Co., 500 5 Ave., New York, N. Y., **$245,000.** Glen Markt, American Air Lines, La Guardia Field, New York, archt.

Mass., Holyoke—UNDERGROUND SYSTEM—City, Mayor's Office, City Hall, underground sys., incl. conduit work, piping, to P. J. Kennedy & Co., 10 Division St., Holyoke, **$49,750.**

★**†S. C., Charleston**—SHIPYARD SERVICES—Yards & Docks Annex, Navy Dpt., Arlington, Va., fence around ammunition depot, power house, services, paving in connection with facilities for inactive vessels at shipyard to V. P. Loftis Co., Builders Bldg. Charlotte, N. C., **$837,000.** CD 7/2—ENR 7/11, under

Alta., Lethbridge — SWIMMING POOL — City, F. Steedman, clk., swimming pool, 5 Ave. and 16 St. W., to Bird Const. Co., Ltd., **1321**

Alta., North Lethbridge—SWIMMING POOL—City, swimming pool, to Bird Constr. Co., Ltd., 3 Ave., Lethbridge, approx. **$60,000.** Meech, Michell & Meech, McFarland Bldg., Lethbridge, archts.

B. C., Vancouver—GAS MAIN—British Columbia Electric Ry. Co., Ltd., A. C. Eddy, ch. engr., 425 Carrall St., 9,300 ft. high pressure 16 in. gas main, to Bennett & White Constr. Co., Ltd., 510 W. Hastings St. **$125,000.** Awarded 4/12.

Ont., Bronte—PIER—Dpt. P. Wks., Ottawa, Ont., reconstructing pier, to C. S. Boone Dredging & Const. Co. Ltd., 49 Wellington St. E., Toronto, **$124,000.** R. Blais, c/o owner, engr. CD 5/28—ENR 5/30.

Ont., Cornwall—STREET RAILWAY EXTENSION—Cornwall Street Railway, 15 2d St. E., street railway exten.-parallelling C.N.R. tracks from station to East Cornwall, own forces; excavating for above track, to Peel Const. Co., Ltd., 75 Main St. N., Brampton. Est. about **$100,000.** C. I. Bacon, engr. CD 2/14—ENR 3/7.

Ont., Thorold—SWIMMING POOL—Kiwanis Club, Inc., Thorold, swimming pool, to Aiken & MacLachland, 7 N. Queen St., Kitchener. Est. **$50,000.** W. M. Wilson, 20 Henry St., St. Catherines, archt.

Ont., Toronto—OIL TANK—Imperial Oil, Ltd., 56 Church St., rein.-con., wood piling oil tank fdn., to McNamara Const. Co., Ltd., 42 Industrial St., Leaside, approx. **$260,000.**

Que., St. Joseph d'Alma—ARENA—Municipality, arena to Charles Maltais, St. Joseph d'Alma. Est. **$60,000.**

Quebec—Province of Quebec, Quebec City, road construction, Lennoxville, to Fabi & Sons, Ltd., 150 Belmont, Montreal, **$65,000.** Dpt. Lands & Forest, Quebec City, engrs.

N. S., Halifax—Municipality, street paving, to Standard Paving Co., Ltd., Lady Hammond Rd. **$73,959.** CD 2/13—ENR 3/7.

PUBLIC BUILDINGS

BIDS ASKED

Bids Asked August 20

†Mo., Kansas City—Pub. Bldgs. Admin., K. L. Hullsick div. engr., post office alterations. **$220,000.** CD 11/7—ENR 12/27.

Bids Asked August 22

Mass., Belchertown — Commonwealth of Mass., Dpt. Mental Health, 100 Nashua St., Boston, brick, steel, concrete power plant addn., incl. new boiler, Mass. State School. $75,000. Plans deposit $10. McClintock & Craig, 458 Bridge St., Springfield, engrs. CD 1/22—ENR 1/24.

Bids Asked August 27

Calif., LaMesa—LaMesa Spring Valley Union School Dist., 4730 Palm Ave., LaMesa, 12 classroom, frame and stucco, kindergarten and administration school 70 and Powers Sts. $210,000. S. W. Hamill, Bank of America Bldg., San Diego, archt. Plans deposit $6.

Bids Asked August 27

N. C., Carthage—Moore Co., Bd. Educ., negro high school. Plans deposit $25. W. H. Ditrick, 115 W. Morgan St., Raleigh, archt.

Bids Asked August 28

Ore., Corvallis—Consolidated School Dist. 9, 1 and 2 story, rein.-con., frame Franklin grade school, agricultural-industrial shop bldg. and addn. to Washington school. **$420,000.** Plans deposit $75. Stokes & Allyn, Hughes Bldg., Portland, archts. CD 7/24—ENR 8/1. Extended date.

Bids Asked August 30

★**R. I., Providence**—U. S. Eng., Park Square Bldg., Boston, 16, Mass. bldg. and utilities for Veterans Admin. hospital. Serial 19-023-47-3. CD 7/26—ENR 8/1

Bids Asked August 30

†Wyoming—Bureau Reclamation, Customhouse, Denver, 2, Colo., transformers for Kortes powerplant, Kortes Unit, Spec. 1431. Extended date. CD 7/12—ENR 7/18.

Bids Asked September 3

†California—Bureau Reclamation, Denver 2, Colo., furnishing, del. f.o.b. cars at shipping point of f.o.b. cars at Redding, steel accordion door for 13 line, steel sash window for 1 line; sliding door for C line, for Keswick Powerplant, Kennett Div., Central Valley Proj., Spec. 1459.

N. Y., New York—New York City Housing Auth., 122 E. 42 St., Zone 17, superstructures and mechanical work for James Weldon Johnson Houses, 112 to 115 Sts., Park to 3 Aves. CD 4/16—ENR 4/18.

Bids Asked September 4

Ia., Bellevue—City, H. Yeager, City Clk. electric plant addn., furnishing and installation of one Diesel generating unit in power plant. Stanley Engr. Co., Muscatine, engr. Plans deposit $25.

Bids Asked September 9

Minn., Alexandria—City, H. S. Campbell, clk., install new turbine and accessories at municipal power plant. Over $100,000. Pfeifer & Schultz, 702 Wesley Temple bldg., Minneapolis, engrs. CD 7/10—ENR 7/18.

Oklahoma—Dpt. of Interior, Bureau Reclamation, Denver, Colo., furnishing and delivering f.o.b. cars at shipping point or f.o.b. cars at Altus, Spec. 1452.

Bids Asked September 24

†Colorado—Bureau Reclamation, Custom House, Denver 2, Colo., three 21,000-hp, 400-rpm, vertical-shaft hydraulic turbines with pressure regulators; three governors with pump. equip. for regulating speed of 21,000-hp turbines; three 16,667-kva, 90% power-factor, 400-rpm, 6,900-volt, 3 phase, 60-cycle, vertical-shaft, alternating-current generators for Estes Power plant and one 11,300 hp, 327-rpm, vertical shaft hydraulic turbine with pressure regulator; governor with pump. equip. for regulating speed of 11,300 hp turbine; 9,000-kva, 90% power-factor, 327-rpm, 6,900-volt, 3-phase cycle, vertical-shaft, alternating current generator for Marys Lake Power Plant, Colorado-Big Thompson Proj., Spec. 1466.

LOW BIDDERS

★**Conn., Wesport**—Bd. Educ., rejected bids July 10, general contract school addn., LB. **$779,600** *** plumbing, LB. **$49,900** *** electrical work LB. **$51,440** *** heating LB. **$99,261.** CD 7/15—ENR 7/18 under LB.

Mich., Marquette — City, Diesel Electric plant, to A. H. Proksch, Iron River. **$88,105.**

N. H., Manchester—City, City Hall, August 1, Webster School, brick, steel addn., from Davison Constr. Co., 1306-A Elm St., Manchester. **$331,000.** CD 10/8/45—ENR 10/18.

★**O., Bedford**—Parks Realty Co., E. Parks, 11118 Miles Ave., Cleveland, one story 28x34 ft. houses in Darlington Rd. Separate contracts. **$525,000.**

★**O., Cleveland**—City Transit Sys., 1404 E. 9 St., rejected bids July 12, garage bldgs. at Woodhill Rd. Ave., Woodland Ave., 350x360 ft. garage; 60x350 ft. office; 40x60 ft. wash house; 90x100 ft. service station; 35x60 brick, one and two bldg. **$1,600,000.** A. C. Wolf, Swetland Bldg., Cleveland, archt. CD 6/5—ENR 6/13.

O., Cuyahoga Falls—Bd. Educ., Cuyahoga Falls, no bids received July 30, 1 story, school. CD 7/11—ENR 7/18.

S. C., Hampton—Hampton Housing Auth., c/o Senator George Warren, Hampton, 30 houses, to Burton & Co., Holly Hill, Est. **$225,000.** CD 5/24—ENR 5/30.

Vt., Brandon—F. R. Free, purch. agt., State Dpt. Welfare, Montepelier, rejected bids July 16, Brandon State School. LB. **$138,492.** CD 6/20—ENR 6/27.

★**†Washington**—Bureau Reclamation, Custom House, Denver, Colo., 1 generator for Grand Coulee Dam, Columbia Basin proj. from Westinghouse Electric Corp., Denver, Colo., **$1,110,000;** 3 generators, **$3,390,000.** CD 7/26.

Ont., Toronto—Greenwood Centre Inc., C. Deacon, chmn., P. Wright, secy., 37 Baulton St., 1 and 2 story, L-shaped, brick steel center between Empire and Booth Sts. east of Don River to Foundation Co. of Ontario, Ltd., 1220 Bay St., Toronto. About **$400,000.** Mathers & Halberby, 86 Bloor St., W., archts.

CONTRACTS AWARDED

†Arizona — Bureau Reclamation, Custom House, Denver, Colo., three 50x50 ft., regulating gates for installation in spillway at Davis Dam, on Colorado River, to Consolidated Steel Corp., 5700 S. Eastern Ave., Los Angeles, Calif., **$168,145.** CD 4/29—ENR 5/2.

†Colorado—Bureau Reclamation, Customhouse, Denver, transformers, lightning arresters, automatic step-voltage regulators, for Sterling and Holyoke substations on Big Thompson Proj., Spec. 1215, to Allis-Chalmers Mfg. Co., 1126 S. 70 St., Milwaukee, Wis., **$81,409.** CD 5/15.

★**Mich., Detroit**—Dpt. Street Railways, St. Jean & Shoemaker Aves., brick, concrete, steel garage and bus storage to W. E. Wood Co., 4649 Humbolt, **$698,650.** CD 7/10—ENR 7/11.

★**N. Y., New Hyde Park**—Bd. Educ., Dist. 5, New Hyde Park, school, Hillside Ave. and Lakeville Rd., to Jonval Constr. Co., 220 E. 42 St., New York, Zone 17, **$659,300.** CD 6/12—ENR 6/20, under LB.

★**Tex., Denton**—Texas State College for Women, Denton, dining hall to R. E. McKee, P. O. Box 2848, Dallas. **$809,992.** CD 8/7—ENR 8/15.

Ont., London—Wartime Housing Ltd., 159 Bay St., Toronto, 50 addnl. houses, to Sterling Const. Co. Ltd., 2492 Sandwich St. E. Windsor. Est. about **$250,000.** CD 12/5/45—ENR 1/24.

Que., Mount Royal—Town, D. W. Lough, secy., town hall, community center, on Roosevelt Ave. and Churchill Rd., to Towle Const. Co., Ltd., 1502 St. Catherines St. W., Montreal. About **$210,000.** J. M. Miller, 4741 Roslyn Ave., Mount Royal, archt. W. R. J. MacNeil, c/o owners, engr.

COMMERCIAL BUILDINGS

BIDS ASKED

Bids Asked August 21

S. C., Florence—**Sears Roebuck, c/o A. E. Creamer, mgr., addn. to store bldg. H. Raymond Weeks, Inc., 504 Snow Bldg., Durham, archt.**

Bids Asked August 22

N. Y., Manhasset—Diocesan Bldg. Comn., 191 Joralemon St., Brooklyn, church addn. Ralph Hume, 139 E. 53 St., New York, Zone 19, archt.

Bids Asked About September 1

O., Akron — Westminster Presbyterian Church, Rev. Wm. F. MacCalmont, 1250 W. Exchange St., church and educational bldg., $300,000. Charles W. Bolton & Son, 1505 Race St., Phila., archts. CD 1/23—ENR 1/31.

Pa., Phila.—H. A. Linn, 1204 Filbert St., apartment development, Cottman St. and Roosevelt Blvd. $300,000. G. Daub, 2123 Delancey St., archt.

Bids Asked

★**Conn., Middletown**—Harry J. Kay, c/o Carl F. Segerberg, archt., 57 Barbara Rd., Middletown, 94 homes, frame constr., Westfield and Newfield Sts. **$750,000.** CD 5/9—ENR 5/23.

Tex., Houston—Manford C. Sessman, 2020 Wichita St., constructing dwellings, $225,000.

SOON LETS CONTRACT

Conn., Bristol—Trinity Episcopal Church, High St., Bristol, soon lets contract church, parish house and rectory. $220,000. Asheim & Wilkins, 211 State St., Bridgeport, archt. CD 2/7—ENR 2/14.

★**Tex., Dallas**—J. C. Penny Co., 25½ Highland Park Shopping Village, Dallas, soon lets contract 13 story, bsmnt., steel frame, concrete pier fdn., brick, hollow tile, department store. $750,000. W. W. Aschlager, 212 S. St. Paul St., archt. CD 8/23/45—ENR 9/6/45.

O., Warren—Hellenic Orthodox Church St. Demetrios, Warren, church, at 429 High St. Reich & O'Brien, Union Savings & Trust Bldg., archts.

CONTRACTS AWARDED

Calif., Beverly Hills—Allied Contractors, Inc., 9700 W. Pico Blvd., Los Angeles, 53 frame and stucco dwellings, Pico Blvd. and Beverwil Dr. Owner builds. **$275,000.**

★**Calif., Campton**—Roscomare Corp., 4200 Coliseum St., Los Angeles, 308 two and three bedroom dwellings, 88 rental units, frame and stucco, Orchard St. and Bullis Rd. Owner builds. **$3,000,000.** H. J. Hamer, 8473 Beverly Blvd., Los Angeles, archt.

★**Calif., Fresno**—Profession Building Corp., R. L. Abraham, pres., 2310 San Pablo, 5 story, L-shaped rein.-con. medical office, to Fisher & McNulty, 510 Mattei Bldg., Fresno, **$650,000.** W. Wagner, Bank of America Bldg., engr. and archt.

★**Calif., Los Angeles**—Allied Contractors, Inc., 9700 W. Pico Blvd., Los Angeles, 230 single frame, frame and stucco dwellings, at 135 St. and Vermont Ave. Owner builds. **$1,250,000.**

Calif., Los Angeles—Hancock Properties, Inc., c/o Joseph, Fletcher & Joseph, archts.-engrs., 728½ N. Highland Ave., 4 story, 100-bed hospital, 6701 Melrose Ave., to E. J. Bunjes, 9240 W. Pico Blvd., Los Angeles, over **$205,000.**

Calif., San Jose—Veterans Cooperative Housing Project, Valley Homes Inc., c/o G. E. Sobey, archt., 69 S. 1 St., 82 5 and 6 room residences, West Parr Ave. near Campbell, to C. N. Swenson Co., 355 Stockton Ave., over **$400,000.**

COMMERCIAL BLDGS. (Contracts Awarded, Cont'd.)

★**D. C., Wash.**—J. Pollin, 2414 39 St. N.W., seven 16 unit apartment bldgs., 1241-1249 Valley Ave. S.E. Owner builds. **$560,000.** Berla & Abel, 1636 Conn. Ave. N.W., archt.

Fla., Orlando—Southern Bell Telephone Co., Hurt Bldg., Atlanta, Ga., exchange bldg. addn., to Barge-Thompson Co., 136 Ellis St. N.E., Atlanta, Ga. **$250,000.** Awarded 7/29.

Ia., Davenport—Blackhawk-Perry Corp., Blackhawk Hotel, remodeling and modernizing hotel, to Tunnicliff Constr. Co., 105 Fillmore St., approx. **$210,000.** Kruse & Parish, Kahl Bldg., archts.

Kan., Pittsburg—Mount Carmel Hospital, Sister Mary Anne, Admin., 3 story, 44x176½ ft., 1 story, section 38x68 ft. brick, rein.-con. nurses home, to McCarthy Bros. Constr. Co., 4902 Delmar Blvd., St. Louis, Mo. Approx. **$375,000.** CD 7/17—ENR 7/25.

★**La., Baton Rouge**—Mid-State Construction, Alexandria, 500 homes, own forces, **$4,500,000.** CD 8/2.

★**La., Baton Rouge**—Baton Rouge General Hospital, 929 Government Ave., hospital, to R. P. Farnsworth & Co., Inc., 1515 S. Salcedo St., New Orleans. **$1,200,000.** Neild & Somdal, City Bank Bldg., Shreveport, archts.

Md., Baltimore—Panay Housing Corp., Elliott Dr., Asburton St., thirty-three 2 story, bsmnt. 18x32 ft. residences. Owner builds. **$235,000.** Lawrence A. Menefee, 504 Morris Bldg., archt.

Md., Baltimore—Riggs Bldg., Corp., 102 W. Center St., thirty-five 2 story, bsmnt. 18x30 ft. brick residences. Owner builds. **$245,000.** Lawrence A. Menefee, 504 Morris Bldg., archt.

★**Mass., Boston**—New England Tel & Tel Co., 50 Oliver St., Boston, 185x185 ft. 14 story brick, steel, concrete, telephone exchange at High, Pearl, Franklin and Congress Sts. to Turner Constr. Co., 38 Newbury St., Boston. **$17,000,000-$18,000,000.** Cram & Ferguson, 248 Boylston St., Boston, archts. CD 8/5—ENR 8/15.

★**Mo., Jennings (St. Louis, 20, P.O.)**—H. B. Deal & Co., Inc., 1218 Olive St., St. Louis, Zone 3, ninety-seven 1 story, 24x32 ft., brick, rein.-con., dwellings Croydon Hills. Owner builds. **$824,500.** W. F. Hellmich, 6024 Sutherland Ave., St. Louis, Zone 9, archt.

Mo., Kansas City—V. J. Hale, 2448 Myrtle St., 46 residences, Estes Park Gardens, own forces, **$275,000.**

Mo., Kansas City—George C. Norton Constr. Co., 1016 Baltimore, 40 residences, own forces, $250,000.

★**Mo., St. Louis**—St. Louis University, Rev. P. J. Holloran, S. J. pres., 221 N. Grand Blvd., St. Louis 3, constr. and completion 4 story, bsmnt. 1 shaped 150x275 ft. rein.-con., brick, stone, addn. to medical school bldg. Grand Blvd. and Vista Ave., separate contracts. **$750,000.** A. J. Widmer & Associates, Inc., Arcade Bldg., 806 Olive St., St. Louis 1, archts. and engrs.

★**Mo., Sikeston**—Missouri Delta Community Hospital, E. P. Coleman, pres., rein.-con., brick, steel and stone hospital, to McCarthy Bros. Constr. Co., 4903 Delmar Blvd., St. Louis 8. **$558,000.** Est. $700,000. J. Gamble Rogers, 156 E. 46 St., New York 19, N. Y., archt.

★**N. Y., Buffalo**—Pearce & Pearce Const. Co., 3400 Main St., 85 double 2 story frame houses for 170 family units for veterans housing in Amherst and Tonawanda, 1 mi. north of Kenmore, starting 500 ft. north of Kenmore Ave. and running 4,500 ft. along Niagara Blvd., also starting at Davis Ave. and running 2,000 ft. along Niagara Blvd. to point 150 ft. south of Harrison Ave. Owner builds. **$1,350,000.**

★**N. C., Charlotte**—Group of Charlotte doctors, c/o A. G. Odell, Jr., engr. and archt., Latta Arcade, Charlotte, 10 story, 55x110 ft medical bldg., air-conditioned, Kings Dr., to J. A. Jones Constr. Co., 209 W. 4 St. Est. **$650,000.**

★**N. C., Charlotte**—Charlotte Doctors, Dr. J. A. Elliott, chn., 8 story, steel, pre-cast slab Professional Bldg., 406 N. Tryon St., to J. A. Jones Constr. Co., 209 W. 4 St. Est. **$700,000.** J. N. Pease & Co., 214 N. Church St., engrs. and archts.

O., Cleveland—Ohio Bell Telephone Co., 750 Huron Rd., top floor addn. to telephone exchange, 5400 Prospect Ave., to Cleveland Constr. Co., 3866 Carnegie Ave. **$235,000.** CD 6/21—ENR 7/4.

O., Middleburgh Heights—Briarcliff Homes, 1404 E. 9 St., W. Wachs, pres., 50 single 30x30 ft. and 24x36 ft. homes, Pearl Rd., own forces. **$300,000.**

Ore., Portland—Craft Constr. Co., 2305 S.E. 50 St., 28 dwellings, 3 commercial bldgs. near S.E. 64 and Tibbetts Sts., day labor. **$220,000.** Harry Fowler & Sons, 4910 S.E. Powell St., archt.

★**Pa., Bridgeport**—Hughes Park Village, Inc., 1503 Widener Bldg., Phila., 400 residence development, Hughes Park, separate contracts, **$4,000,000;** commercial bldg. incl. theatre, food market and drug store, separate contracts, **$500,000.**

Pa., Darby—Stanley M. Fried, c/o W. B. Siddall, Drexel Hill, residential development, separate contracts, over **$205,000.**

★**Pa., Drexel Hill**—Tyson Constr. Co., 132 Garrett Rd., Upper Darby, 98 residences, Marshall Rd., separate contracts, **$882,000.**

★**Pa., Phila.**—Dishler Constr. Div., 1004 N. 2 St., 100 residences, separate contracts, **$650,000.** I. W. Levin, 1531 Belmont Ave., archts.

Pa., Phila.—L. Jamison, c/o Morris A. Kravitz, Inc., 225 S. 15 St., apartment development, separate contracts, over **$205,000.**

Pa., Phila.—J. Korman & Sons, Inc., 6033 Castor Ave., residential development, Summerdale Ave., separate contracts. **$249,000.**

Pa., Phila.—J. Korman & Sons, Inc., 6033 Castor Ave., residential development, Hellerman St., separate contracts. **$256,000.**

★**Pa., Phila.**—Matthew McCloskey & Co., Inc., 1620 N. Thompson St., 1800 one story, all masonry, California type homes, Academy & Grant Aves., separate contracts. **$18,000,000.** J. Ethan Fieldstein, 1325 Walnut St., archt.

Pa., Phila.—John A. Martin, 1812 S. 22 St., residential development, 29 and Mifflin Sts., separate contracts. **$280,000.**

Pa., Phila.—Morris Park Constr. Co., 5725 Malvern Ave., 33 duplex residences, 64 St. and Malvern Ave., separate contracts. **$350,000.** N. Rice, 2220 Chestnut St., archt.

Pa., Phila.—Morris Park Constr. Co., 5725 Malvern Ave., residential development, 68 St. and Malvern Ave., separate contracts. **$349,000.** D. Slott, 7066 Garett Rd., Upper Darby, archt.

★**Pa., Phila**—A. P., Orleans & Co., 100 W. Rockland St., residential development, Tulpehocken St., separate contracts, **$210,000;** Fanshawe St., separate contracts, **$410,000.**

★**Pa., Phila.**—Princeton Constr. Co., c/o N. De Credico, 2039 Moore St., 104 residences, Princeton Ave., Brous and Battrsby Sts., separate contracts, over **$750,000.**

Pa., Phila.—Stenton Builders, Inc., Stenton Ave. and Washington Lane, residential development, Rugby St., separate contracts. **$250,000.**

Pa., Springfield—Wm. P. Sprengel, c/o J. C. Taylor Co., 59 Long Lane, Upper Darby, residential development, separate contracts, over **$205,000.**

★**Pa., Strafford (Paoli P.O.)**—R. J. Verner, 5802 Woodbine Ave., Phila., residential development, separate contracts. **$750,000.**

★**Pa., Whitemarsh (Chestnut Hill, P.O.)**—Whitemarsh Village Corp., c/o Matthew McCloskey & Co., 1620 W. Thompson St., Phila., 1000, one story, precast concrete roof, all masonry, homes, separate contracts. **$10,000,000.** J. Ethan Fieldstein, 1325 Walnut St., Phila., archt.

Pa., Willow Grove—Mrs. Stella Ball, 131 Ellis Rd., residential development to Ball, Ball & Hoffman, 131 Ellis Rd., over **$205,000.** Awarded 8/1.

★**Tenn., Knoxville**—E. M. Webb, 717 Gay St., 100 brick veneer houses, day labor. **$800,000.**

Tex., Dallas—Gulf States Life Insurance Co., Main and Akard Sts., Dallas, remodeling and addn. to existing office, incl. air-conditioning sys., to Henry C. Beck Co., Tower Petroleum Bldg., Dallas. **$379,800.** CD 7/15—ENR 7/18.

★**Ont., Thorold**—The Ontario Paper Co., Ltd., Torold, 2 and 4 story, bsmnt., concrete, brick, terra cotta tile office bldg., to The Foundation Co. of Ontario, Ltd., 1158 Bay St., Toronto, approx. **$5,000,000.**

Que., La Tugue—Cong. of Grey Nuns, Nicolet, 4 story, 67x198 ft., brick, stone addn. to Sacred Heart Hospital and Orphanage, Commercial St., to J. L. Guary et Frere Ltd., 437 Guy St., Montreal, about **$210,000.** D. Deshaies, Drummondville, archt.

Que., Quebec City—Parish of Notre Dame de la Paix, 3 Ste. Marguerite St., 60x180 ft. stone, brick church, St. Roch St. between St. Eleurie and Ste. Marguerite Sts., to Francois Jobin, Inc., 88 St. Louis Rd., about **$250,000.** A. Dufresne, 143 Royale St., Beauport, archt.

Sask., Moose Jaw—Reverend Sisters of Charity, Moose Jaw, Providence Hospital administration bldg., nurses home, to W. J. Jones, 7 E. Athahasca. Est. **$250,000.**

Sask., Regina—Harvey Lunan Constr. Co., Ltd., 207 Darke Block, 45 homes, Lakeview area. Owner builds. About **$320,000.** CD 6/28—ENR 7/11.

★**Sask., Regina**—Housing Enterprises Ltd., 408 Westman Chambers, 1791 Rose St., Regina, 99 single family dwellings and one semi-detached, to Bird Const. Co., Ltd., 7 and Smith Sts. About **$515,000.** D. H. Storms, gen. mgr. CD 6/20—ENR 6/27.

INDUSTRIAL BUILDINGS

BIDS ASKED

Bids Asked August 22

Ont., Toronto—TRANSFORMER STATION—Toronto Electric Commrs., 14 Carlton St., transformer station. $60,000.

Bids Asked

Conn., Waterbury—WAREHOUSE—Malcolm W. Starr Corp., Watertown Ave., Waterbury, 100x135 ft. 1 story, brick, steel, concrete warehouse, Watertown Ave. $60,000. Henry T. Moeckel, 35 Hillcrest Ave., Naugatuck, archt. CD 7/16.

Idaho, Montpelier—PLANT—Idaho Creameries, Inc., 14 and Bannock Sts., Boise, 1 story, 100x125 ft., masonary cheese plant with steam heat, $70,000. Wayland & Fennel, Idaho Bldg., archts.

Ill., Chicago—FACTORY—Edith Building Corp., c/o archts., 1 story, 403x515x580 ft., brick, concrete, steel factory. Engineering Systems, 221 N. LaSalle St., engrs.

O., Circleville—GRAIN ELEVATOR—Pickaway Grain Co., Circleville, grain elevator addn., incl. grain-drying equip. $90,000.

Pa., Sharon — SERVICE BLDG. — Pollock Timblen Co., State St., 1 story, 70x300 ft., concrete block, service bldg. **$60,000.** Cleppie & Cleppie, 72 Vine Ave., archts.

Tex., Carrollton—MILL AND PLANT—National Metal Products Co., c/o J. Curtis Sanford, Merchants Bank Bldg., Dallas, tubing mill, $125,000; plant, $225,000; metal rolling strip mill, $175,000; swimming pool, playgrounds, etc. $40,000. CD 8/6—ENR 8/15.

★**Tex., Dallas**—MILL PLANT, etc.—Southwest Building Products Co., Twr. Pet. Bldg., felt prod. mill, boiler plant and pump house. **$890,000.** CD 8/6—ENR 8/15.

Tex., Henderson—PLANT—Henderson Clay Products, Henderson, clay products mfg. plant. $150,000. CD 5/17—ENR 5/23.

Tex., Hereford—PLANT—Deaf Smith Co., Food Products Co., canning and food processing plant. $100,000. CD 6/19—ENR 7/4.

Tex., Houston—TERMINAL, etc.—Glenn H. McCarthy, Sterling Bldg., Houston, constructing terminal and loading dock facilities, $250,000; natural gas pipe lines, $225,000; crude oil pipelines, $125,000; gas treating plant, $250,000. CD 4/12—ENR 5/2.

★**Tex., Texas City**—PLANT—Carbon & Carbide Chemical Corp., Texas City, chemical plant imprvs., incl. 51x160x101 ft. equip. bldg., $600,000; three 29x31 ft. pump houses, $175,000; 55x452 ft., compressor bldg., $1,200,000; 20x33 ft., pump houses, $75,000; 51x344 ft., furnace bldg., $900,000; three 12x18x10 ft. electric contl. houses, $200,000; 202x20 ft., gas separation contl. bldg., $450,000. CD 6/6—ENR 6/27.

Ont., Niagara Falls — PLANT — Canadian Carborundum Co. Ltd., Stanley St., bauxite storage, receiving shed, Stanley St. About $250,000. C. Climo, c/o owners and C. D. Howe Co., 36 James St., S. Hamilton, engrs.

SOON LETS CONTRACT

Ill., Chicago — SUB-STATION-SWITCHHOUSE, etc.—Commonwealth Edison Co., 72 W. Adams St., soon lets contract 1 story, brick, concrete, Roseland sub-station add., switchhouse, transformer court, $275,000. Holabird & Root, 333 N. Michigan Ave., archts.

Ill., Chicago—PLANT—Process Color Plate Co., 522 S. Clinton St., soon lets contract 3 story, 69x106 ft., brick, steel, concrete, printing plant, $200,000. Friedman, Alschuler & Sincere, 28 E. Jackson Blvd., archts.

Ind., Hammond—PLANT—LaSalle Steel Co., Hammond, soon lets contract steel plant addn. and alterations, over $75,000.

★**Mass., Worcester** — WAREHOUSE — New England Grocers Supply Co., 41 Artic St., soon lets contract 200x400 ft. brick, steel, concrete warehouse, refrigeration plant incl., Grove St. $500,000. L. F. Caproni, 1221 Chapel St., New Haven, Conn., archt. CD 8/1—ENR 8/15.

Mo., St. Louis—FACTORY—Ace Mfg. Co., 2215 Pine St., Zone 3, soon lets contract 1 story, 65x155 ft., brick, concrete factory at 2140 Cole St. J. P. Wunderlich, 3524 Lawn Ave., Zone 9, archt.

Me., Scarboro—PLANT—F. H. Snow Canning Co., Scarboro, soon lets contract 1 story, 125x225 ft., brick, concrete plant. $125,000. CD 5/31—ENR 6/13.

Pa., Pittsburgh—GARAGE—McKinley Gregg Auto Co., 5803 Center Ave., soon lets contract 1 story, brick, concrete garage. $60,000. Hoffman & Crumpton, 700 Century Bldg., archts.

Tenn., Memphis—PLANT—Southern Cotton Oil Co., 1351 Williams Ave., soon lets contract shortening plant. Norton & Rice, 165 Baptist Hospital Bldg., archts.

Tex., Madisonville—PLANT—Jim Standley, Madisonville, soon lets contract food processing and storage plant. $55,000.

Wash., Sequim — DAIRY — Dungeness-Sequim Co-operative Creamery Co., Sequim, soon lets contract 1 and 2 story part bsmnt., 105x117 ft., rein.-con. masonry, dairy. $100,000. Pyramid Co., Inc., 320 8 Ave. N., Seattle, engr. CD 6/14—ENR 6/27.

INDUSTRIAL BLDGS. (Soon Lets Contract. Cont'd.)

W. Va., Owings—LAMP HOUSE, etc.—Consolidated Coal Co., Fairmont, soon lets contract 2 story, 79 x 85 ft., brick, concrete block, steel frame lamp house and bathhouse, Mine No. 32. $60,000.

N. S., Halifax—WAREHOUSE—D. F. Trottier, mgr. McCall-Frontenac Oil Co. Ltd., 1563 Barrington St., soon lets contract warehouse and tank installation. About $58,000. R. Young, c/o owner, engr. CD 1/26/45—ENR 2/8/45.

★**Que., St. Johns**—PLANT—Singer Mfg. Co. Ltd., 165 St. Paul St., St. Johns, soon lets contract 80x450 ft., 1 story tool and needle room dpt. 2 towers, 4 story, bsmnt. 50x50 ft. rein.-con. slab, brick, about $525,000. T. Pringle & Son, Ltd., 485 McGill St., Montreal, engrs.

LOW BIDDERS

★**Mass., Worcester** —WAREHOUSE— New England Grocers Supply Co., 41 Arctic St., Worcester, rejected bids July 30 200x400 ft., brick, steel, concrete warehouse, **$500,000.** Leo F. Caproni, 1221 Chapel St., New Haven, Conn., archt. CD 7/31—ENR 8/8.

CONTRACTS AWARDED

★**Calif., Avon**—CONTROL—Tidewater-Associated Oil Co., Avon, crude distillation unit, control bldg., and switch bldg., stills, towers, tanks, piping, to Bechtel Bros.-McCone Co., 220 Bush St., San Francisco. Est. **$2,500,000.**

★**Calif., El Segundo**—DISTILLATION UNIT —Standard Oil Co. of California, 225 Bush St., San Francisco, crude oil distillation unit, 30,000 bbls. per day, to Bechtel Bros.-McCone Corp., 3780 Wilshire Blvd., Los Angeles, approx. **$2,250,000.** CD 10/2—ENR 10/11.

★**Calif., Lodi** — PLANT — General Mills Co., (Sperry Flour Co.), 180 New Montgomery St., San Francisco, 6 story, 120x160 ft., cereal mfg. plant, 100x200 ft. steel warehouse, 50,160 ft. train shed between main bldg. and warehouse, to Utah Constr. Co., 1 Montgomery St., San Francisco. **$1,677,000.** CD 5/17—ENR 5/23.

★**Calif., Los Angeles** — MILL — General Mills Co., 180 New Montgomery St., San Francisco, 7 story, rein.-con. flour mill plant, to Bechtel Bros. McCone Co., 3780 Wilshire Blvd. **$1,000,000.** CD 4/12—ENR 4/18.

Calif., Los Angeles—WAREHOUSE—Percival Steel & Supply Co., 4600 Santa Fe Ave., 1 story, 70x270 ft., frame and corrugated iron warehouse, 10 ton craneway, to Consolidated Steel Co., 5700 So. Eastern Ave., **$75,000.**

Calif., Pasadena—PLANT—Supreme Dairy Farms, 490 S. Michillinda Ave., 2 story, 115x150 ft., steel frame, milk bottling and processing plant, at Sunnyslope St. and Foothill Blvd., to G. O. Gartz, 3908 N. Mission Rd., Los Angeles, approx. **$125,000.** F. Ropp, Roosevelt Blvd., Los Angeles, engr.

Calif., Santa Paula — PACKING HOUSE — Limoneira Co., Santa Paula, 2 story, 100x100 ft. and 100x207 ft., masonry fruit packing houses addns., Limoneira Ranch, to Bechtel Bros. McCone Corp., 3780 Wilshire Blvd., Los Angeles. **$175,000.** CD 5/8—ENR 5/23.

Calif., San Carlos—PLANT—Mathews Conveyor Co., 300 7 Ave., San Francisco, 1 to 2 story, 100x317 ft. stucco, sheet metal mfg. plant, to Wagner & Martinez, 181 S. Park St., San Francisco. Est. **$137,000.** Meyers & Evers, 1201 Kohl Bldg., San Francisco, archts. CD 5/29—ENR 6/13.

Calif., Santa Ana—WAREHOUSE—Towner Mfg. Co., 2111 W. 17 St., 100x300 ft. and 50x200 ft., steel frame and iron warehouse and shop bldgs., to Consolidated Steel Corp., 5700 S. Eastern Ave., Los Angeles, approx. **$92,000.**

Calif., Vernon—TRUCKING TERMINAL—R. W. Cleghorn, 1025 S. Olive St., Los Angeles, 75x310 ft., rigid steel frame trucking terminal, to Buttress & McClellan, 1013 E. 8 St., Los Angeles, approx. **$70,000.** J. MacDonald, 1013 E. 8 St., archt.

★**Calif., Vernon**—PLANT—Pacific Press, Inc., 3440 S. Hope St., Los Angeles, 1 story, structural steel frame, concrete, brick printing plant, at Fruitland Ave. and Soto St., to Bechtel Bros.-McCone Co., 3780 Wilshire Blvd., Los Angeles, over **$1,000,000.** R. D'Jerf, 635½ S. LaBrea Ave., Los Angeles, archt.

Conn., Hartford—WAREHOUSE—Gagnon & Pooler, 193 Afleck St., brick concrete warehouse Walnut St. to Brooklawn Constr. Co., 68 Pratt St., Hartford. **$100,000.** Sherwood Jeter, 15 Lewis St., Hartford, archt.

★**Conn., New Haven**—ELECTRIC GENERATING STATION — United Illuminating Co., 128 Temple St., 75x200 ft., 150 ft. brick, rein.-con. electric generating station, Grand Ave., to C. W. Blakeslee & Sons, Inc., 58 Waverly St. **$900,000.** CD 8/8.

★**Fla., Wildwood** — TERMINAL — Seaboard Airline Railway Co., c/o Railroad Comn., Tallahassee, terminal, double tracking of main railroad lines, own forces. **$500,000.** CD 7/22 ENR 8/8.

Fla., Tampa—PLANT—Kieckhefer Container Co., 1011 Twiggs St., mfg. plant to Gates Constr. Co., Stovall Prof. Bldg. **$90,000.** Bids 6/21. CD 6/3—ENR 6/6.

Ill., Chicago—FACTORY—Mid-West Textile By-Products, 111 W. Washington, 4 story, 65x125 ft., brick factory, to John Schwartz, 4954 N. Monticello St. Est. **$200,000.**

Ill., Chicago — FACTORY — Verson All Steel Press, 1355 E. 93 St., 1 story, 101x156 ft., brick, factory addn., to Norman Bouchard, Western Springs. **$75,000.** J. L. Marley, 7720 S. Emerald St., archt.

★**Ill., Lincoln**—FACTORY, etc.—Lehn & Fink Products Corp., 683 5 Ave., New York, N. Y., general contract 427 x 500 ft., cosmetics factory and 60 x 200 ft. office, to B-W Constr. Co., 307 N. Michigan Ave., Chicago. Est. **$1,800,000.** Awarded 7/29. F. V. Prather, 3 S. Michigan Ave., Chicago, archt. R. E. Hattis, 28 E. Jackson St., Chicago, handling mechanical drawings. J. W. Emig, 333 N. Michigan Ave., Chicago, doing structural drawings.

Ind., Fort Wayne — FACTORY — Salisbury Axle Div. of Dana Corp., Bennett Rd., Toledo, O., design and construction 1 story, steel factory addn., concrete fdn., northwest of here, to A. Bentley & Sons Co., 201 Belmont St., Toledo, O. Est. **$350,000.**

Ia., Cedar Rapids—PLANT—Modern Laundry & Dry Cleaning Co., 621 First Ave., SE., concrete block, cement, steel, 85x140 ft. with offset 15x30 ft. laundry and dry cleaning plant bldg. at 833-857 A Ave., N.E., to William Stusal, 1126 Nineteenth St. S.E., Cedar Rapids. **$55,000.**

Ia., Estherville—HOG KILLING PLANT—Tobin Packing Co., E. F. Voight, mgr., hog killing plant, to W. A. Klinger, Inc., 201 Warnock Bldg., Sioux City, **$100,000.** CD 7/22—ENR 8/1.

Ind., Fort Wayne—PLANT—Cleveland Graphite Bronze Co., 1700 St. Clair Ave., Cleveland, O., remodeling National Can Co. plant for mfg. automotive parts, to Wermuth, Inc., 1036 St. Marys St.***plumbing, to Industrial Piping & Engineering Co., 1340 Grant, Ft. Wayne.

Ia., Belmond—PLANT—Thompson Hybrid Corn Co., Belmond, hybrid corn plant, to C. E. Larson, Fort Dodge approx. **$150,000.** F. W. Griffith, Fort Dodge, archt.

Ia., Marshalltown — WAREHOUSE — Nash-Finch Co., 430 Oak Grove St., Minneapolis, Minn., general contract 2 story, bsmnt., 100x120 ft., brick, concrete warehouse, 9 Ave. and State St., to R. W. Rinderknecht Co., 113 F Ave., N.W., Cedar Rapids, about **$130,000.** O. W. Latimer & Co., 702 Security Bldg., Cedar Rapids, engr.

Ia., New Hampton—City, A. Griffith, clk., July 24, furnish, install 2 diesel engine generating units, and auxiliary equipment, etc., to Worthington Pump & Machinery Corp., 2428 University Ave., St. Paul. **$185,945.** CD 6/27—ENR 7/4.

La., Lafayette—SALES AND SERVICE—Hub City Motors, Lafayette, masonry, steel auto sales and service bldg., to Romero & Theall, Youngsville. **$80,000.** Bids 5/1, awarded 7/31. Favrot & Reed, Nola Bldg., New Orleans, archt.

Me., Lisbon — TEXTILE MILL — Cotwool Mfg. Co., Lisbon Center, 1 story, 35-50 ft., brick boiler plant, textile mill addn., to H. P. Cummings Constr. Co., Winthrop. **$100,000.** CD 5/31—ENR 6/6.

Mass., Cambridge — FACTORY — General Radio Co., 275 Mass. Ave., Cambridge, June 19, rein.-con. factory, Mass Ave., to Lawson W. Oakes, Inc., 30 Huntington Ave., Boston. **$122,000.** CD 6/14—ENR 6/20.

Mass., Fall River—SERVICE BLDG.—Firestone Rubber & Latex Co., Firestone Ave., Fall River, altering 1 story brick, concrete service bldg. Owner builds. **$55,000.**

Mass., Lawrence—BREWERY—Cold Spring Brewing Co., 609 S. Union St., 2 story, brick, concrete brewery plant addn., to White Constr. Co., 5 Earl Ave. Terrace, Medford. Est. **$55,000.**

Mass., Melrose — SALES & SERVICE STATION — Maher Motor Sales, Inc., Tremont St., 1 story, 100x100 ft., brick, concrete sales and service station, Tremont St., to S. Rotondi & Sons, 140 Franklin St., Stoneham. **$60,000.** CD 7/8.

Mass., Quincy—PLANT—Pneumatic Scale Corp., 65 Newport Ave., Quincy, 145x224 ft., 1 story brick, concrete plant to George A. Fuller Co., 11 Beacon St., Boston. **$242,000.**

Mass., Roxbury—FACTORY, etc.—Paris Paper Box Co., 1018 Mass. Ave., 2 story, 124x350 ft., rein.-con. factory and warehouse, Massachusetts Ave. to Canter Constr. Co., 37 Auburn St., Brookline. Est. **$245,000.** D. J. Abrahams & Assoc., 651 Boylston St., Boston, archts. CD 7/3—ENR 7/25.

Mass., Springfield—BOILER PLANT—Monsanto Chemical Co., 812 Monsanto Ave., 1 story, brick, steel, concrete boiler plant, to Adams & Ruxton Constr. Co., 1387 Main St. Est. **$60,000.**

Mass., South Walpole — PLANT — Bird Machine Co., South Walpole, Side Bay and Mexx, high story 80x120 ft. brick, steel, concrete plant, boring mill dpt. to Munroe-Langstroth, Inc., 52 North Washington St., North Attleboro. **$100,000.** CD 3/1—ENR 3/7.

Mass., South Walpole — LABORATORY — Bird Machine Co., South Walpole, May 24, brick steel laboratory to Munroe-Langstroth, Inc., 52 North Washington St., North Attleboro. **$55,000.** CD 5/24—ENR 5/30.

Mich., Detroit—FOUNDRY—Acme Foundry Co., 2503 22 St., Detroit, brick, concrete, steel foundry to Bennage & McKinstrie Co., 4612 Woodward Ave., **$85,000.**

★**Mich., Muskegon** — PLANT — Continental Motors Corp., 205 Market Ave., concrete, steel plant addn., incl. warehouse and receiving dock to A. J. Alstrom Const. Co., 2316 Miner Ave., **$500,000.**

Minn., Minneapolis—WAREHOUSE—American Excelsior Co., 3200 E. Hennepin Ave., T. S. Ketcham, resident mgr. concrete, brick warehouse and boiler house addn. to A. Cederstrand Co., 966 Central Ave., about **$71,000.** CD 7/1—ENR 7/25.

Minn., Minneapolis—RECEIVING STATION —Powers Dry Goods Co., D. Olsom, pres., 5 St. and Nicollet Ave., 15,000 sq. ft. underground receiving station in S. 4 St. between Nicollet and Marquette Aves., rein.-con. receiving platform above grade designed to support 6 story parking garage later, to Naugle-Leck, Inc., 726 Roanoke Bldg., Minneapolis. About **$90,000.** Johnson & Backstrom, 1210 Roanoke Bldg., Minneapolis, archts.

Minn., Rochester—WAREHOUSE—Gamble-Robinson Co., D. Atwood, 301 N. 5 St., Minneapolis, general contract 1 story, 120x250 ft. warehouse and 1 story, 51x84 ft. wing, cold and freeze rooms, to Kraus-Anderson, Inc., 508 S. 8 St., Minneapolis. Total est. over **$200,000.** CD 5/31—ENR 6/13.

Minn., St. Paul—WAREHOUSE, etc.—Thermal Co., Inc., 2410 University Ave., general contract 1 story, 100 x 150 ft., brick, tile warehouse and office, 2522-26 University Ave., to G. J. Grant Constr. Co., 839 Como Ave., approx. **$60,000.** Bids 2/1. CD 1/30—ENR 2/7.

Minn., South St. Paul—TRUCK AND MAINTENANCE SHOP—Fox Oil Co., 722 North Concord St., 1 story 115x168 ft. rein.-con., fdn., concrete block walls truck and maintenance shop to Peterson Bros. Constr. Co., 775 15 Ave. N., South St. Paul. About **$100,000.** CD 8/2/45—ENR 8/23/45.

Miss., Houston—FACTORY—Chicasaw Co., Houston, garment factory, to A. M. Myatt, Houston. **$73,089.**

Miss., Jackson—SALES and SERVICE—Max McLaurin, 705 S. State St., auto sales and service bldg., to Campbell Constr. Co., 792 Commerce St. Est. **$60,000.** J. T. Canizaro, Capital National Bank Bldg., archt.

Mo., St. Louis—REPAIR SHOP—Broadway Moto Inc., Frank Rateree, 3746 S. Broadway, St. Louis, 18, Mo., 1 story, 95x96 ft. L shaped automobile repair shop, brick and rein.-con. etc., 3852 South Broadway, to W. C. Harting Constr. Co., 722 Chestnut St., St. Louis, 1, Mo. **$55,000.** F. R. Nauman, 714 N. Woodlawn, Kirkwood, St. Louis, 22, Mo., archt. C. A. Koerner, Syndicate Trust Bldg., 915 Olive St., St. Louis, 1, Mo., engr.

Mo., St. Louis—FACTORY BLDG.—C. Hager & Son Hinge Mfg. Co., 2451 Dekalb St., St. Louis 4, 1 story, 150x290 ft. overall brick, and rein.-con. factory, 2460 Dekalb St. and 133 Victor St., to Fruin-Colnon Contracting Co., 1706 Olive St., St. Louis, 3, **$100,000.** Maura, Russel, Crowdell & Mullgardt, 1620 Chemical Bldg., 721 Olive St., St. Louis, 1, archts.

Mo., St. Louis—REPAIR SHOP, etc.—Columbia Motor Service Co., 1422 N. Tenth St., Zone 6, 1 story, 35x35 ft., brick, concrete repair shop and 1 story, 32x180 ft. garage, 1415 Singleton St., Zone 3, to W. C. Harting Constr. Co. 722 Chestnut St., Zone 1. Est. **$55,000.** F. R. Nauman, 714 N. Woodlawn St., Kirkwood, St. Louis, Zone 22, archt.

Mo., St. Louis—WAREHOUSE, etc.—A. B. Lewis, et al., Memphis, Tenn., 1 story, 75x140 ft., brick, concrete warehouse and office bldg., 2911 Washington Ave., Zone 3, to Fruin-Colnon Contg. Co., 1706 Olive St., Zone 3. Est. **$55,000.** W. Levy, Railway Exchange Bldg., 611 Olive St., Zone 1, archt.

Mo., St. Louis—PLANT—McQuay-Norris Mfg. Co., 2320 Marconi Ave., Zone 10, 1 story, 83x138 ft., brick, concrete locker bldg. for piston ring mfg. plant, 2210 Marconi Ave., to H. B. Deal & Co., Inc., 1218 Olive St., Zone 3, P. J. Hoener, 3415 S. Kingshighway Blvd. Zone 9, archt.

Mo., St. Louis—FACTORY, etc.—Superior Boat & Mill Co., 3820 N. Bway., Zone 7, 1 story, 40x100 ft., brick, concrete factory and office, 4827 N. Bway., to Bonded Hauling Co., 3820 N. Bway., Zone 7.

N. J., Camden—PLANT—DiMedio Lime Co., 26 N. 18 St. Camden, 1 story, 40x106 ft., steel, concrete, cinder block mfg. plant, to T. Pagan, 933 N. 20 St. **$60,000.** William S. Saint & Co., 455 Curtis Ave., Delair, archts.

N. Y., Buffalo—GARAGE—International Ry. Co., B. J. Yungbluth, pres., 17 Court St. W., 1 story, 64 x 560 ft., steel frame and concrete block garage addn., to Geo. W. Walker & Sons, Inc., 7700 Elmwood Ave., approx. **$150,000.**

O., Cleveland — GARAGE — Central Greyhound, Inc., 2600 Hamilton Ave., maintenance garage, 2500 Hamilton Ave., to A. M. Higley Co., 2036 E. 22 St. **$70,000.** C. H. Shively, Fremont, archt.

INDUSTRIAL BLDGS. (Contracts Awarded, Cont'd.)

O., Cleveland—FACTORY, etc.—Cornblum Pants Co., 203 St. Clair Ave., 2 story, 100x150 ft., brick, steel, concrete factory and office, E. 27 St. and Superior Ave., to L. Zuckerman, 1836 Euclid Ave., **$110,000.**

Ore., Portland—GARAGE—Portland Milk Products Assn., 5260 N. E. Union Ave., 2 story, 50x180 ft., rein.-con. garage, to Robertson, Hay & Wallace, 1801 Grand St. Est. over **$55,000.** R. D. Hemenway, Bedell Bldg., archt.

Pa., Bridgeport—PLANT—Tube Methods, Inc., Bridgeport, 1 and 2 story, 140x140 ft., brick, steel plant and office, to D. L. Reiff, 15 E. Airy St., Norristown, **$100,000.** G. A. Greeby, Montgomery Trust Bldg. Arcade, Norristown, engr. Awarded 7/31.

Pa., Donora—GARAGE, etc.—A. Zeffero, Donoro, 1 story, 100x200 ft., concrete, steel frame garage and warehouse to Frank D. Patterson Supply Co., Monongahela. **$75,000.** C. C. Compton, Donora, archt.

Pa., Ellwood City—PLANT—Dustproof Mattress Cover Co., 947 Penn. Ave., 1 story, brick, concrete block, steel frame plant, to Mathew Tiero Constr. Co., New Castle. **$60,000.** Schnall & Balufeur, 44 Court St., New York, N. Y., archts.

Pa., Essington—PLANT—Linde Air Products, Essington, general interior and exterior alterations, to present mfg. bldg., to Rafferty-Kennedy Co., Broad and Jerome Sts., Phila. **$60,000.** Awarded 8/2. CD 7/22—ENR 7/25.

Pa., Harmarville—BOILER BLDG.—Gulf Research & Development Co., Gulf Bldg., Pittsburgh, 1 story, 70x120 ft., brick boiler bldg., to George W. Seaman, 5388 Pennsylvania Ave., Pittsburgh. **$100,000.** CD 6/20—ENR 6/27.

Pa., Malvern—PLANT—Socony Vacuum Oil Co., 1500 Walnut St., Phila., bulk plant, warehouse fdns., loading racks, to C. H. Schwertner & Son, Inc., 1228 Hamilton St., Phila. **$55,000.** E. M. Harvey, Div. Engr. Awarded 8/1.

★**Pa., Meadville** — FOUNDRY — National Bearing Div. American Brake Shoe Co., E. A. Williajs, wks. mgr., 4930 Manchester Ave., St. Louis, 10. Mo., and 230 Park Ave., New York, N. Y., 293x735 ft., foundry, 39x93 ft., boiler houses, both 1 story, structural steel, brick, rein.-con., to Ragnar Benson, Inc., 4744 West Rice St., Chicago, Ill., est. **$2,000,000.** CD 6/27—ENR 7/4.

Pa., Phila.—PLANT—Phila. Gas Works Co., 1401 Arch St., plant addn., own forces. **$57,500.**

Pa., Phila. — DEPOT ADDITION — Phila. Transportation Co., Mitten Bldg., depot addn., 32 and Rauphin Sts., own forces. **$60,000.**

Pa., Pittsburgh — WAREHOUSE — Cherry Burrell Corp., 1139 Penn Ave., 1 story, 120x160 ft., precast concrete warehouse, to Uhl Constr. Co., 6001 Butler St. Est. **$55,000.** CD 4/12.

Pa., Plymouth Meeting (Ambler P. O.)—PATTERN SHOP—United Pattern Co., 6 Ave. and Harry Sts., Conshohocken, 1 story, 90x140 ft., brick, block and structural steel pattern shop, separate contracts. **$60,000.**

Pa., Ridgeway—GARAGE, etc.—West Penn Power Co., West Penn Bldg., Pittsburgh, 1 story, L-shaped, 80x120 ft., and 80x80 ft., brick and concrete steel frame garage and storage, to Edward Crump Jr., 4031 Bigelow Blvd., Pittsburgh. **$60,000.**

Pa., Telford—FACTORY—Ralph & Mathilda First Corp., Telford, 1 story, 110x138 ft., brick, concrete factory, to Hughes-Foulkrod Co., 1505 Race St., Phila. **$75,000.** Lockwood Greene Engineers, Inc., 10 Rockefeller Plaza, New York, N. Y., engr.-archt. Awarded 8/2.

Pa., Uniontown—FACTORY—General Cigar Co., 119 W. 40 St., New York, N. Y., 1 story, bsmnt., 120x250 ft., brick, steel cigar factory, to J. J. Bendik, Gilmore St. **$130,000.** CD 3/29.

Pa., West Chester—PLANT—Brandywine Mushroom Corp., West Chester, 1 story, concrete block and unfinished wood mushroom houses, separate contracts. **$56,000.** CD 6/20—ENR 7/11.

S. C., Greenville — WAREHOUSE — J. B. Carr Biscuit Co., Wilkes-Barre, 1 story, 100x300ft., warehouse to McKoy-Helgerson Co., Greenville. **$100,000.**

S. C., Greenville — AUTO SALES, etc. — Central Realty Co., Greenville, auto sales and service garage, to Potter & Shackelford, Greenville. **$100,000.**

S. C., Greenville—PLANT—Mountain City Foundry & Machine Co., c/o Greenville, plant addn., increasing floor space from 9,000 to 75,000 sq. ft. Owner builds. **$100,000.**

Tenn., Greenville — WAREHOUSE — Planters Tobacco Warehouse Co., Greenville, rebuild warehouse No. 3, to Cross Constr. Co., Greenville. **$125,000.** CD 8/7.

Tenn., Memphis—SUB-STATION—Memphis Light & Power Co., c/o Walk Jones & Walk Walk Jones, Jr., archts., Shrine Bldg., Substation 2, to Seth E. Glem, 166 Monroe Ave., **$64,500.**

Tenn., Nashville—PLANT—Dr. Pepper Bottling Co., 2701 West End Ave., 2 story, brick, steel, tile, concrete bottling plant, 7 Ave., Church and North Sts., to Nile E. Yearwood, Stahlman Bldg. Est. **$65,000.**

Tex., Brownsville—PLANT—Hygeia Milk Products Co., Brownsville, concrete, hollow tile milk plant addn., to W. D. Ferguson & Sons, Harlingen, approx **$55,000.** Cocke & Bowman, 1220 Harrison St., Harlingen, archts. CD 2/18—ENR 2/21.

Tex., Dallas—WAREHOUSE—B. C. Miller, 9000 Denton Dr., warehouse, to W. A. Colwell, 6128 Morningside Dr., **$70,000.**

Tex., Dallas—SLAUGHTER HOUSE—Swift & Co., 2300 S. Lamar St., slaughter house at main plant, force-account, **$55,000.**

Tex., El Paso—SERVICE STATION—Sears Roebuck & Co., El Paso, service station, to Rob. E. McKee, 1918 Texas St., approx. **$55,000.** B. Cocke, 1504 Milam Bldg., San Antonio, archt.

Tex., Houston—PLANT—Asbestos Shingle Mfg. plant, to W. S. Bellows Constr. Co., 716 N. Everton St., Houston, approx. **$350,000.** CD 7/26—ENR 8/1.

★**Tex., Houston** — PLANT SHOP, STORAGE — Carnation Co., 3003 D'Amico, constr. of main plant for milk processing, shop and storage, to T. Bate & Son, 1107 Girard St., **$958,000;** constr. electrical wiring for milk processing plant to Gulf Electric Co., 401 Lockwood. **$128,000.** CD 3/4—ENR 2/14.

★**Tex., Houston** — GARAGE & SERVICE BLDG.—Glenn H. McCarthy, Sterling Bldg., Houston, 5 story, bsmnt., 307x107 ft., structural rein.-con., frame, steel, garage and service bldg., to Tellepsen Constr. Co., 3900 Clay St., Houston, approx. **$1,000,000.** CD 7/12—ENR 7/18.

Tex., Mercedes—PLANT—A. A. Carleton & Associates, Mercedes, fruit & vegetable canning plant. Owner builds, **$125,000.** CD 7/31—ENR 8/15.

Tex., San Antonio—PLANT—Guadalupe Valley Pecan Co., 730 W. Summit St., constructing addns. and imprv. existing plant, to A. P. Rheiner & Son, 409 Insurance Bldg., approx. **$55,000.** Weidner & Co., 609 Alamo National Bldg., archts.

Wis., Kenosha—SALES, SERVICE—Evans Implement Co. R. 50, 80x160 ft., 1 story concrete, steel, farm implement sales and service bldg., to Lindemann Const. Co. 4708 6 Ave., W. C. Presto, Libertyville, Ill., archt.

Wis., Milwaukee — FACTORY — Alfa Machine Co., 1305 N. 4 St., Zone 12, 1 story, 110x124 ft., brick, steel factory, concrete fdn., to W. W. Oeflein, Inc., 5345 N. Hopkins Ct., Zone 9, est. **$50,000.**

Alta., Edmonton—GARAGE, SHOWROOMS—Waterloo Motors Ltd., c/o J. A. Christie, 10 Tweedsmuir Crescent, garage, showrooms, to Bennett & White Const. Co. Ltd., Edmonton About **$100,000.** Rule, Wynn & Rule, Birks Bldg., archts. CD 1/9—ENR 1/17.

Alta., Calgary—WAREHOUSE—McCoshams Storage and Distributing Co. Ltd., Calgary, warehouse 8 Ave., and 6 St. E., to Buchan Const. Co., Ltd., 106-7 Burns Bldg., Calgary, about **$120,000.**

N. B., Fredericton—PLANT—Capital Co-operative Ltd., Fredericton, dairy plant, to New Brunswick Contr., Ltd., Fredericton. About **$250,000.** CD 5/8—ENR 5/16.

Ont., Brockville—PLANT—Brockville Gas Co., Brockville, gas plant, to Brantford Eng. & Mfg. Co. Ltd., 280 Ottawa St. N., Hamilton. Pub. Utilities Comn., Brockville, engr. CD 7/8.

Ont., Dundalk — PLANT — United Farmers Co-operative Co. Ltd., 28 Duke St., Toronto, D. Arias, mgr. Dundalk. 30x110 ft. 2 story concrete fdn. plant to H. Cambell & Sons, Main St., W., Ridgetown. About **$60,000.** CD 5/16.

★**Ont., Fort William** — PLANT — The Ogilvie Flour Mills Co. Ltd., Front St., Fort William, V. W. MacLean, mgr. renovating plant, Front St., own forces. **$500,000.**

Ont., New Toronto—FACTORY, etc.—Dominion Colour Corp., R. D. Hill, mgr., 1 and 2 story, 82x170 ft., brick, steel factory and office, to Mallenhaur Contracting Co., Ltd., 188 Perth Ave., Toronto, about **$75,000.** A. Austin, 79 Quebec St. W., Guelph, archt. M. Fador, 44 Farmham Ave., Toronto, engr. CD 5/7.

Ont., Ottawa—OFFICE—Brading's Brewery, 840 Wellington St., Ottawa, 1 story, bsmnt. office at brewery to Carter Const. Co., Ltd., 419 Cherry St., Toronto. About **$100,000.** T. J. Ferguson, 297 Victoria St., Toronto. archt. CD 5/8—ENR 5/30.

Ont., Toronto — WAREHOUSE — European Silk Co., 110 Wellington St. W., Toronto, office and warehouse, Front St. W. and University Ave. to William Guinane, 5 Line, Clarkson. Est. **$100,000.** CD 6/6—ENR 6/27.

Ont., Toronto—PLANT—F. T. James Fish Co. Ltd., 29 Church St., repairing plant, to The R. G. Kirby & Sons, Ltd., 539 Yonge St. About **$75,000.**

Que., Lachine — PLANT — Dominion Wire Rope & Cable Co., Ltd., 35 St. Joseph St., Lachine, plant addn. to J. J. Shea & Co., Ltd., 660 St. Catherine St. W., Montreal. About **$200,000.** Spence & Mathias, 2063 Union Ave., Montreal, archts.

Que., Quebec City—PLANT—Singer Sewing Machine Co., 700 St. Catherine St. W., Montreal, plant structure, 258 St. Joseph St., to Magloine Cauchon, Ltd., 311 DeLaSalle St., about **$130,00.** N. A. Armstrong, 19 Melinda St., Toronto, Ont., archt.

Que., Rimouski—FACTORY—Gulf Furniture Co., Ltd., Rimouski, 75x160 ft. 1 story concrete fdn., cement walls factory to day labor. About **$100,000.** A Lecherc, de l' Eveche St., Rimouski, archt.

Que., Ville La Salle—FACTORY—Ralston, Purina Co. Ltd., N. K. Stevens, mgr., 7470 Newman Ave., factory exten., to Angus Robertson, Ltd., 660 St. Catherine St. W., Montreal. About **$100,000.**

Sask., Estevan—PLANT—Dominion Electric Power, Ltd., Estevan, power plant addn., to P. W. Graham & Sons, Ltd., Willard Hotel, Moose Jaw. About **$300,000.**

UNCLASSIFIED

BIDS ASKED

Bids Asked August 21

B. C., Gibsons Landing—WHARF—Secy. Dpt. P. Wks., Ottawa, Ont., reconstructing wharf, about $50,000. Plans deposit $20. R. Blais, engr. CD 4/8—ENR 4/18.

Que., Sorel—WHARF REPAIRS—Secy. c/o owners, Dpt. P. Wks., Ottawa, Ont., harbor repairs and imprvs. steel fenders, exten. to walkway, counter sinking of tie-rods ends on the Elevator wharf and old Canada Steamship wharf, about $61,000. Plans deposit $10. R. Blais, engr.

Bids Asked August 24

Ga., Waycross—TRANSFER PLATFORMS—Atlantic Coast Line Railroad Co., L. S. Jeffords, ch. engr., Wilmington, N. C., transfer platforms. CD 5/16—ENR 5/23.

Bids Asked August 27

N. Y., Jones Beach—ELECTRICAL SYSTEM—Long Island State Park Comn., Babylon, electrical sys. at Jones Beach State Park.

Bids Asked September 3

†**Montana**—TRANSMISSION LINE EQUIPMENT—Bureau Reclamation, Custom House Denver, Colo., one 69,000-volt, ampere, 3-pole, single-throw, manually gang-operated, outdoor-type disconnecting switch, with manually gang-operated grounding blades for Savage Pump Plant, 69 Kv Transmission line, Fort Peck Proj., Spec. 1458.

†**Utah, Clearfield** — CHIMNEY — Clearfield Naval Supply Depot, Clearfield, 125 ft. rein.-con. chimney partially lined with brick.

Bids Asked September 16

Mo., Herman—LIGHTING—City, c/o Mayor H. Oschner, City Hall, electric distribution sys., street lighting. $70,000-$75,000. Russell & Axon, 6635 Delmar Blvd., University City, St. Louis, Zone 5, engrs. CD 7/16—ENR 7/25.

Bids Asked

Texas—OIL PIPELINES—Bell Oil & Gas Co., Burkburnett crude oil pipe line gathering sys., imprvs., extens. $65,000. CD 6/14—ENR 6/27.

Tex., Tom Ball—GRANDSTANDS—Harris County Fair Assoc., c/o L. Goodson, Tom Ball, 2 steel frame grandstands, each 900 seating cap. Bosewil & Joseph, M. & M Bldg., Houston, engrs. CD 7/17—ENR 8/8.

LOW BIDDERS

Calif., Oceanside—PIER—City, City Hall, rejected bids July 17, reconstructing municipal pleasure pier, L.B. $220,070. Will readvertise. CD 7/26—ENR 8/1, under L.B.

Me., Portland—PIER—State, Maine Port Authority, Augusta, August 2, extension of state pier from Ellis C. Snodgrass, 465 Congress St., Portland. $246,721. Fay, Spofford & Thorndike, 11 Beacon St., Boston, Mass., engrs. CD 7/18—ENR 7/25.

★†**Tex., Galveston**—U. S. Eng., 606 Santa Fe Bldg., Galveston, extending sea wall past 61 St. protecting Army Airfield, project abandoned. **$500,000.** CD 9/19/45—ENR 9/27.

Wisc., Superior—SWIMMING POOL—City, July 30, swimming pool from A. Henningsen, Sparta, $97,200. Boyum Schubert & Sorenson, La Crosse, archts.

★**Alaska, Anchorage**, — Alaska Railroad Dpt. Interior, Anchorage, June 29, 2,223 ft. 10 to 30 in. storm sewers, from Lytle & Green & Mathis, Hoge Bldg., Seattle, 4, Wash., $30,-006***clearing, grubbing, grading, draining, surfacing, from Stock & Grove, Hoge Bldg., Seattle, 4, Wash., $454,802; 100x200 ft. shop, 111x260 ft. locomotive shop, 50x98 ft. blacksmith shop, 40x80 ft. wheel shop, steel frames, 1 story, bsmnt., 60x200 ft. rein.-con. warehouse also 2 story, bsmnt., 66x163 ft. rein.-con. dormitory for terminal facilities, from Morrison-Knudsen Co., Inc., 319 Broadway Boise, Idaho. $1,163,636 and $433,747 respectively. CD 6/26.

CONTRACTS AWARDED

Florida—POWER LINES—Central Florida Electric Cooperative, Inc., Chiefland, constructing addnl. power lines, own forces. $50,000. CD 6/6—ENR 6/27.

UNCLASSIFIED (Contracts Awarded, Cont.)

Fla., Jacksonville—TRANSMISSION CABLE—City, City Hall, ducts manholes and other facilities and laying cables connecting Laura St. Electric Sub-station with Southside Substation high voltage power lines, to Ivy H. Smith Co., 1525 San Marco Blvd., Jacksonville, Zone 7. $88,875. Awarded 7/11. CD 6/21—ENR 6/27.

Mass., Holyoke—UNDERGROUND SYSTEM—City, Mayor's Office, City Hall, underground sys., incl. conduit work, piping, to P. J. Kennedy & Co., 10 Division St., Holyoke, $49,750.

Pa., King of Prussia—HOT HOUSE—Henry I. Faust Co., Highland Ave. and Old Lancaster Rd., 1 story, 36x200 ft., double thickness glass hot house, to Lord & Burnham Co., 420 Lexington Ave., New York, N. Y., over $55,000. Awarded 8/3.

★**S. C., Charleston**—SHIPYARD SERVICES—Yards & Docks Annex, Navy Dpt., Arlington, Va., fence around ammunition depot, power house, services, paving in connection with facilities for inactive vessels at shipyard to V. P. Loftis Co., Builders Bldg., Charlotte, N. C., $837,000. CD 7/2—ENR 7/11, under LB.

Tex., Brady—RACETRACK, etc.—July Jubilee, Inc., Brady, racetrack, grading and leveling 355 acres, all steel grandstand, comfort stations, outside lighting sys., etc., force-account, $60,000.

Tex., Houston—PARK DEVELOPMENT—Frank W. Sharp & Associates, 6901 Lyons St., owner builds. $75,000.

Wis., Beloit—FIELD HOUSE—Beloit College, 1 story, 160x180 ft. rein.-con. field house to Cunningham Bros., 359 E. Grand Ave., $80,000-100,000. CD 6/21—ENR 7/4. Under Commercial Buildings.

N. S., West Head—WHARF—Dpt. P. Wks., Ottawa, Ont., reconstructing wharf, to Mosier & Rawding, Liverpool, about $66,000. R. Blais, c/o owner, engr. CD 6/5—ENR 6/6.

PROPOSED PROJECTS

Including class of projects previously listed as *postwar*

COMMERCIAL BUILDINGS

★**Ala., Montgomery**—Bradley Real Estate, Montgomery, plans by Pembletton & Mims, Title Guaranty Bldg., Birmingham, 110 unit brick apartment, $1,000,000.

★**Calif., Danville**—Archbishop of San Francisco, 1100 Franklin St., San Francisco, boy's home, incl. admin. offices, chapel and cottages to house 30 boys each, for 125 boy capacity. $1,000,000.

★**Calif., Los Angeles**—Imperial Order of Shriners, W. F. Kendrick, in charge, Roosevelt Blvd. and Pennypack Circle, Phila., Pa., hospital. $500,000. Financing provided.

★**Calif., Sacramento**—M. J. King, Inc., 231 Franklin St., San Francisco, 1,500 two and three bedroom residences, Del Paso Manor and Marconi Ave. Over $7,500,000.

★**Calif., San Francisco** — Maimonides Health Center for the Chronic Sick, B. P. Lilienthal, pres., 1600 Scott St., plans by Mendelsohn, Dinwiddie & Hill, 233 Sansome St., Maimonides Health Center for the Chronic Sick. $600,000.

Calif., San Jose—Owl Drug Co., 657 Mission St., San Francisco, 2 story drug store. $250,000.

★**Calif., San Rafael**—L. Hamlin, 3 Redding Way, 138 residences in Bret Harte Meadows, Unit 2. Over $1,000,000.

Calif., Tiburon—Mrs. Dorothy M. Anderson, 104 Buena Vista Ave., Mill Valley, forty 2 and 3-bedroom residences, Tiburon Hy. $400,000.

Del., Wilmington—St. Paul's R. C. Church, Rev. Joseph A. Lee, rector, 301 Jackson St., plans by Gleeson & Mulrooney, Fox Bldg., Phila., Pa., school. $250,000. Financing provided.

Ill., Chicago—Augustana Hospital, 409 W. Dickens St., plans by Adolph A. Hanson & Associates, 1058 W. 92 Pl., 3 story, brick, concrete, steel, stone nursery. $250,000.

★**Ill., Chicago**—Chicago Medinah Temple Assoc., 14 E. Ohio St., plans by W. J. Ryan, 43 E. Ohio St., 3 story, brick, concrete, annex to Medinah Temple. $500,000.

Ill., Melrose Park—Hawthorne Home Development Co., 176 W. Adams St., Chicago, fifty 1 story, 28 x 30 ft. frame residences. $300,000.

Ill., Urbana—Park St. Mercy Memorial Hospital, c/o J. Brand, Urbana, plans by Berger & Kelley, 44 Main St., 5 story L-shaped brick, concrete hospital addn.

★**Ind., Indianapolis**—Indiana Bell Telephone Co., 240 N. Meridian St., 5 story, addn. to office bldg. and central telephone exchange. $1,000,000.

La., Westwego—Our Lady of Prompt Succor Church, Westwego, plans by Diboll-Kessels, Baronne Bldg., New Orleans, Catholic church. $250,000.

Md., Baltimore — Oakles Village, Inc., Oaklee Village, plans completed by J. E. Moxley, 1722 Ellamont St., commercial center 1 and 2 story, inc. stores, super market, theatre, etc. $400,000. Financing provided.

Md., Baltimore — Springhill Corp., 3801 Cottage Ave., plans by Hal A. Miller Assoc., 337 St. Paul Pl., Baltimore, fifty 2 story, bsmnt., brick, Keyworth and Roland View Aves. $350,000. Financing provided.

★**Mass., Andover** — Phillips Andover Academy, Salem St., plans completed by Perry, Shaw & Hepburn, 31 St. James Ave., Boston, 2 story, brick, steel Students Union Bldg. $700,000. Financing provided.

Minn., Northfield—A. L. Roberts Hotel Co., Hotel Arthur, Rochester, 60 room, rein.-con., brick hotel. $300,000.

Minn., St. Paul — St. Paul Seminary, Very Rev. L. O. Wolf, rector, Cretin and Summit Aves., plans by Land & Raugland, 502 Wesley Temple Bldg., Minneapolis, library, 2200 Grand Ave. Over $205,000.

★**Nevada** — Grand Canyon-Boulder Dam Tours, Inc., E. H. Crosby, pres., 9028 Sunset Blvd., Los Angeles, Calif., plans by P. R. Williams, 3757 Wilshire Blvd., Los Angeles, Calif., development of 500,000 acres on Nevada of Lake Mead into recreational area, 250 room lodge and other resort bldgs. Ex. $1,000,000.

★**N. J., Atlantic City**—Boardwalk Lands Corp., c/o M. Lubin, Real Estate Trust Bldg., Phila., Pa., preliminary plans hotel. $1,000,000. Financing provided.

N. Y., Bellerose—Syndicate, A. Cutler, pres., c/o S. Klein, archt., 90-04 161st St., Jamaica, sixty 1 and 2 family homes, Commonwealth Blvd., 86 and 87 Aves., 87 Dr. $480,000.

N. Y., Brooklyn—Chezner Smith Bldg. Co., c/o Morris Rothstein & Son, archts., 391 Fulton St., plans completed seventeen 2-family homes, 583-723 Remsen Ave. $221,000. Financing provided.

N. Y., Brooklyn—Levett & Fox, Inc., c/o Morris Rothstein & Son, 391 Fulton St., Zone 1, plans completed eighteen 2-family houses, 2801-2820 Avenue Y. $236,000. Financing provided.

N. Y., Creedmoor—Berni-Roth Co., c/o A. Cassens, Jr., archt., 92-32 Union Hall St., Jamaica, plans completed twenty-three 1 family homes, 249 St. and 81 Ave. $205,000. Financing provided.

N. Y., Garden City—Garden City Community Church, Rev. J. Gardner and Rev. J. Gettemy, pastor, 67 Hilton Ave., plans by T. N. Mansell, 262 S. 17 St., Phila., Pa., church. Over $205,000. Financing provided.

N. Y., New York—DeMornay Budd, Inc., 475 Grand Concourse, Zone 51, plans completed by L. S. Weeks, 101 Park Ave., Zone 17, altering 5 story office and manufacturing bldg., 475 Grand Concourse. $200,000. Financing provided.

★**N. Y., New York**—New York Infirmary for Women & Children, 321 E. 15 St., New York, Zone 3, plans by C. B. Meyers, 31 Union Sq., Zone 3, hospital, York Ave. between 62 and 63 Sts. $5,000,000. Financing not provided.

★**N. Y., New York**—Metropolitan Life Insurance Co., 1 Madison Ave., Zone 10, plans completed by Leonard & Schultze & Assoc., 18 E. 48 St., Zone 17, 19 story office, Crowell-Collier Bldg., 5 Ave. and 51 St. $4,000,000. Financing provided.

★**N. Y., New York**—St. Clare's Hospital, 415 W. 51 St., Zone 19, plans completed by P. C. Reilly, 111 5 Ave., Zone 3, 6 story hospital and convent, 408-14 W. 52 St. $600,000. Financing provided. CD 6/28—ENR 7/11.

★**N. Y., Queens Village**—Parkway Homes, Inc., c/o A. Cassens, Jr., archt., 92-32 Union Hill St., Jamaica, plans completed forty-four 1 family homes, 227 St., 107, 108 and 109th Aves. $695,000. Financing provided.

★**N. C., Charlotte** — Sears Roebuck & Co., S. State and E. Van Buren St., Chicago, Ill., c/o W. S. Lupo, 304 S. Tryon St., plans retail store, outside equipment store and outside service station on 300,000 sq. ft. site, 2 blocks on N. Tryon St. and College St. $1,000,000 or more. Site purchased.

N. C., Greensboro—Greensboro Parish of Catholic Church, Greensboro, parish hall, grammar and high school, Tremont St. To exceed $225,000.

N. C., Mayodan — Washington Mills Co. Mayodan (sponsor) plans YMCA Bldg. $250,000.

★**N. C., Winston-Salem** — Wake Forest College, Wake Forest, new buildings. $6,000,000. Trustees Wake Forest Baptist College, Wake Forest, accepted Z. Smith Reynolds Foundation, Winston-Salem offer of $10,750,000 endowment of Wake Forest College and will remove present location to Winston-Salem within next few years. Financing provided.

O., Columbus—J. Real Neth Theatres Co., 39 Broad St., plans by C. Howard Crane Associates, Inc., 112 Madison St., Detroit, Mich., 2,000 persons seating capacity, black and buff terra cotta theatre W. Broad St. between Burgess and Ogden Aves., incl. 50 ft. stainless steel marquee, and 60 ft. stainless steel neon sign, parking facilities for 200 automobiles. $350,000-$400,000. Financing provided.

Ore., Portland—Montavilla Planing Mill, 7445 N. E. Bway., plans completed by Johnson, Wallwork & Duckhart, U. S. National Bank Bldg., 48 unit court-type dwelling development on tract bounded by NE 67 and 69 Aves. and NE Tillamook and Hancock Sts. $400,000. Legal obstacles to be overcome.

Ore., Seaside — American Legion Post, Seaside, 2 story, 150x210 ft., concrete meeting hall and civic auditorium. $225,000.

Pa., Ardmore—Martin Evangelical Lutheran Church, 57 and Arch Sts., Phila., preliminary plans church, Lower Merion Twp. $205,000. Financing provided.

Pa., North Aronamink (Drexel Hill P. O.)—Bethany Collegiate Presbyterian Church, C. F. Ball, pastor, 4627 Larchwood Ave., Phila., plans by W. H. Thompson, 1717 Samson St., Phila. church and Sunday school. Over $205,000.

Pa., Phila.—Paramount Pictures, Inc., 331 W. 44 St., New York 18, N. Y., plans by M. J. DeAngelis, 1461 Temple Bldg., Rochester, N. Y., altering Roosevelt Theatre, $205,000; Nixon Theatre, $205,000. Financing provided.

★**Pa., Phila.**—Temple University, Broad and Berks Sts., plans by J. A. Nolen, Jr., 6316 Germantown Ave., classroom bldg., Park and Montgomery Aves. $300,000; remodeling mfg. bldg. for Dental School $500,000. Financing provided. CD 2/7/45—ENR 3/8/45.

★**Pa., Pittsburgh**—Montefoire Hospital, 3450 5 Ave., plans by Marks & Simboli 702 Grogan Bldg., 9 story, brick, stone hospital. $500,000.

Pa., Upper Darby—Paramount Pictures, Inc., 331 W. 44 St., New York 18, N. Y., plans by M. J. DeAngelis, 1461 Temple Bldg., Rochester, N. Y., altering Tower Theatre. $205,000. Financing provided.

★**Tenn., Nashville**—Owner, c/o Harte, Freeland & Roberts, archts., 3 Natl. Bank Bldg., 7 story, brick, concrete, steel doctors bldg. $1,000,000.

Tex., Alamo Heights — St. Peters Church, 111 Barrilla St., plans by George Willis, 609 Am. Hos. & Life Bldg., San Antonio, 2 story school. $205,000. Financing provided.

Tex., Baytown — Baytown Methodist Church, Baytown, plans by Ernest L. Shult, 5009 Fannin St., Houston, 2 story, 40x100 ft., stone, masonry church. $205,000. Financing provided.

Tex., Brownwood — Coggin Ave. Baptist Church Congregation, Brownwood plans by W. N. Noonan, 720 Travis Bldg., San Antonio, auditorium and educational bldg. $205,000. Financing provided. CD 8/3/45—ENR 8/23/45.

★**Tex., Carrollton**—J. Curtis Sanford & Assoc., Merchants Bank Bldg., Dallas, 200 dwellings for factory workers. $550,000. Financing provided.

★**Tex., Dalias** — Dallas Academy of Medicine, Dr. Oscar M. Marchman, Med. Arts Bldg., plans by G. L. Dahl, Southland Life Bldg. Annex, medical bldg. $500,000. Financing not provided.

Tex., Dalias — St. Michels Episcopal Church, plans by Fooshee & Cheek, 1901 N. Harwood St., 2 story, brick, stone, concrete church. $210,000. Financing provided.

Tex., Fort Worth—Ted Leveridge, mgr. Everybodys Store, 11 N. Houston St., plans by Preston M. Greren, 905 Neil P. Anderson Bldg., remodeling and air conditioning store, entire block Houston to Belknap Sts. $250,000. Financing provided. CD 7/31.

Tex., Fort Worth — Military Order of Cooties, c/o C. V. Conley, Lake Worth Dr., club house. $210,000.

Tex., Galveston—American Legion Argonne Post 20, Galveston, plans by C. E. Stevens, Trust Bldg., 2 story, brick, concrete lodge. $205,000. Financing not provided.

Tex., Galveston—Peter Douvry, 1702 Blvd. St., plans completed by C. E. Stevens, Trust Bldg., 2 unit, 64 family 2 and 4 story, masonry apartment. $300,000. Financing provided.

★**Tex., Houston**—Congregation Adath Yeshurun, 917 Jackson St., revised plans by Finger & Rustay, 711 Natl. Std. Bldg., synagogue. $750,000. Financing provided. CD 9/23/43—ENR 9/30/43.

Tex., Houston—Fraternal Order of Eagles, 618½ Milam St, lodge. $205,000. Financing provided.

Tex., Houston—Tex-Estate Corp., 201 Main St., hotel. $250,000. Financing provided.

Tex., Midland—Midland Office Bldg., Inc., Midland, sketches by Wyatt C. Hedrick, 1005 First Natl. Bank Bldg., Fort Worth, 7 story, bsmnt. rein.-con. office bldg. $350,000. Financing provided. CD 2/28—ENR 4/4.

Tex., Texarkana — Century Theatre, c/o Paul Ketchum, 409 E. Broad St., theatre. $210,000. Financing provided.

★**Utah, Salt Lake City**—Imperial Order of Shriners, Roosevelt Blvd. and Pennypack Circle, Phila., Pa., W. Freeland Kendrick in charge, plans hospital. $500,000. Financing provided.

B. C., Vancouver—Central Mortgage & Housing Corp., 4 Temporary Bldg., Ottawa, Ont., 50 dwellings. $250,000.

Man., St. Boniface—Central Mortgage & Housing Corp., 4 Temporary Bldg., Ottawa, Ont., 60 dwellings. $310,000.

Ont., Weston—Central Mortgage & Housing Corp., 4 Temporary Bldg., Ottawa, 45 dwellings. $225,000.

LAST MINUTE CONSTRUCTION REPORTS

PUBLIC BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked August 23

Conn., Wolcott—Bd. Educ., Town Hall, elementary school. C. J. Malmfeldt, 36 Pear St., Hartford, archt.

Bids Asked August 26

Mich., Hillsdale—City, City Hall, constructing Diesel power plant bldg., changer, equip. foundations and blower house, etc. Plans deposit $15. Hamilton-Weber, 356 Houseman Bldg., Grand Rapids, engrs. CD 12/3—ENR 1/3.

N. Y., Manhasset—Bd Educ., Union Free School Dist. 6, High School Bldg., bus garage, $55,000. A. F. Gilbert, 358 5th Ave., New York, Zone 17, archt.

Bids Asked August 27

★**N. Y., New York**—New York City Housing Auth., 122 E. 42 St., Zone 17, housing proj., NYS-5, Amsterdam Ave. and 61 St. $4,340,000. Plans deposit $75. CD 1/22/45—ENR 2/8/45.

Bids Asked August 31

★**Tex., Houston**—University of Houston, 4901 St. Bernard St., (selected bidders), 5 stone, masonry dormitories. $2,400,000. CD 7/22—ENR 8/1.

Tex., Houston—University of Houston, 4901 St. Bernard St., laundry plant, $60,000. L. Cato, 2103 Crawford St., Houston, archt., A. C Finn, Bankers Mrg. Bldg., consult. archt.

Bids Asked September 6

★**Ala., Tuscaloosa**—University of Alabama, 3 men's dormitories, $640,000; 3 women's dormitories, $800,000. Miller, Martin & Lewis, 910 Title Guarantee Bldg., Birmingham, archts. CD 8/1.

Bids Asked September 10

La., Pineville—State Dpt. Finance, 201 Capitol Annex Bldg., Baton Rouge, nurses home, doctors home, warehouse, arcade, Huey P. Long Memorial Hospital, Pur. Reg. D-61207 GCL. Plans deposit $30.

LOW BIDDERS

†**California**—Bureau Reclamation, Denver, Colo., August 5, 2 main generators, Shasta Power Plant, Kennett Div., Central Valley Proj., Spec. 1396, from General Electric Co., River Rd., Schenectady, N. Y. $181,081. CD 7/24.

★**B. C., Nanaimo**—Province of B. C., Victoria, boys industrial school from Bennett & White Constr. Co., Ltd., 510 W. Hasting, Vancouver. $946,939. Dpt. P. Wks., Victoria, engrs.

CONTRACTS AWARDED

Calif., Palo Alto—Palo Alto Clinic, 300 Homer Ave., 3 story, bsmnt., clinic addn., to Wells P. Goodenough, 49 Wells Ave. $285,000. Clark & Stromquist, 310 University Ave., archts.

★**Wis., Madison**—University of Wisconsin, 3 story, 3 apartment bldgs. for married couples, men's dormitory, 120 apartments for faculty, brick, concrete, dormitory addn. unmarried veterans, to G. A. Fuller Co., 111 W. Washington St., Chicago, Ill. $4,000,000. R. C. Kirchoff, State Capitol, archt.

COMMERCIAL BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

CONTRACTS AWARDED

Del., Dover—James H. Wood, 15 E. North St., residences, separate contracts, $220,000.

Del., New Castle—Morris Glantz, 313 Grandview Ave., residences Gordon Heights, Wilmington, separate contracts, $408,000.

Del., Wilmington—Facciola Constr. Co., 1308 W. 9 St., residences, Tulip & Scott Sts., separate contracts, $220,000.

★**Del., Wilmington**—Goodley & Nicholas, Inc., 121 Woodrow Ave., residences, Nicholas and Delaware Aves., separate contracts, $30,000.

Del., Wilmington—Goodley & Nicholas, Inc., 121 Woodrow Ave., residences, McDaniel Crest, separate contracts, $340,000.

N. J., Margate City—Bianchi Bros., Margate City, residential development, separate contracts, over $210,000.

N. J., Runnemede—A. Lamorlux, Runnemede, residential development, Northmont, separate contracts, over $205,000.

N. J., Villas—A. Millman, Villas, residential development, separate contracts, over $205,000.

★**O., Cuyahoga Falls**—Heflop Bldg. & Realty Co., 531 W. Market St., Akron, three hundred 1½ story, 24x30 ft., asphalt single roofing, frame, houses, separate contracts, $1,250,000. H. Cassidy, c/o owner, archt.

O., Lyndhurst — Hanson-Beatty Co., 4040 Mayfield Rd., Cleveland, 50 frame, stone, 1½ story, houses on Croydon, Dorset and Brainard Rds., own forces, $325,000.

Pa., Aldan—Roy S. Vollmer, 614 Ballytors Rd., Wynnewood, residential development; separate contracts, $250,000.

Pa., Allentown — Cleste Perrotte, 621 N. Muhlenberg St., Allentown, residential development; separate contracts, $210,000.

Pa., Allentown—John H. & Edward Leh, Elm St. and Robin Hood Rd., Allentown, residential development; separate contracts, $220,000.

★**Pa., Allentown**—Roosevelt Park Homes Inc., 254 W. 54 St., N. Y., 73 residences on Emans Ave., South and Hall Sts.; separate contracts, over $500,000.

Pa., Allentown—Roosevelt Park Homes, 254 W. 54 St., New York, N. Y., residential development, Emans Ave., separate contracts, $250,000.

Pa., Bloomsburg, (P. O. Harrisburg)—W. F. Keiser, P. O. Box 629, Harrisburg, residential development; separate contracts, $220,000.

Pa., Coatesville—William P. Cox, 84 Penn Ave., Coatesville, residential development; separate contracts, $210,000.

Pa., Emans—Harry O. Bean, 104 E. Elm St., Emans, residential development; separate contracts, $220,000.

Pa., Fairview Twp. (P. O. York)—Hutchinson Constr. Co., Box 187, New Cumberland, residential development; separate contracts, $210,000.

Pa. Hatboro—Shubin Building Co., 4 St. and Allegheny Ave., residential development; separate contracts, $240,000.

Pa., Hershey—Haldeman & Savastio, 103 W. Chocolate Ave., Hershey, residential development; separate contracts, $250,000.

Pa., Manor (P. O. Drexel Hill) — Curtis Bailey Co., 69 St. and Walnut St. Upper Darby, residential development, separate contracts, $220,000.

Pa., Media—Seat & Turner, 14 South Ave., Media, residential development; separate contracts, over $210,000.

Pa., Media—Wesley Stillwell, 411 Manchester Ave., Media, residential development; separate contracts, $210,000.

Pa., Norristown—John W. Cullen, 34 S. 18 St., Phila., residential development; separate contracts, $220,000.

Pa., Norristown—Howard J. Jones, 2103 3 St., Norristown, residential development; separate contracts, $450,000.

Pa., Norwood—Sharon Development Co., 17 Park Ave., Norwood, residential development; separate contracts, $394,000.

Pa., Phila.—Henry E. Baton, 1717 Sansom St., Phila., residential development; own forces, $270,000.

Pa., Phila.—Edmund J. Dombkoski, 2385 Orthodox St., residential development; separate contracts, $220,000.

Pa., Phila.—Ecklin Crawford & Schwartz, 763 Hellerman St., residential development; separate contracts, $240,000.

Pa., Phila.—Joseph W. Fisher, 502 W. Godfrey Ave., residential development, Mershon St.; separate contracts, $210,000.

Pa., Phila.—Philadelphia Model Home Builders, 2233 W. Lehigh Ave., residential development; separate contracts, $220,000.

Pa., Phila.—Albert Steinberg, 808 Walnut St., residential development, Pratt, Dyre, Penn, and Leiper Sts.; separate contracts, $220,000.

Pa., Phila.—Benjamin F. Weiss, 1509 68 Ave., residential development; separate contracts, $440,000.

Pa., Prospect Park—V. Harold Curren, 219 S. 44 St., Phila., residential development; separate contracts, $250,000.

Pa., Prospect Park—Frank Duke, 8 St. and Summit Ave., Prospect Park, residential development; separate contracts, $220,000.

Pa., Ridley Park—Roy V. Williams, County Line Rd., Huntington Valley, residential development; separate contracts, $220,000.

Pa., Ridley Twp. (Norwood P.O.)—Ridley Farms Inc., 20 S. 15 St., residential development; separate contracts, $250,000.

Pa., Secone—F. A. Collins Inc., 527 Welsh St., Chester, residential development; separate contracts, $230,000.

Pa., Somerton (P.O. Phila.)—Bermark Co., Morris Bldg., Phila., residential development; separate contracts, $250,000.

Pa., Upper Darby—Edwin C. Prichard, Newtown Sq., residential development; separate contracts, $220,000.

Pa., Upper Darby—Edwin C. Prichard, Newtown Square, residential development on Bishop, Primos, Belmont and Edgemore Aves.; separate contracts, $250,000.

Pa., Upper Darby—Bradley B Robinson, 167 Powell Lane, Upper Darby, residential development on Roosevelt and Wilson Drs.; separate contracts, $440,000.

Pa., York—Herbert R. McCarter, 604 S. Albemarle St., York, residential development; separate contracts, $220,000.

Que., Montreal—N. D. Grace Holding Corp., 20 E. St. James St., Montreal, apartment house, to B. J. Kaufman, 20 E. St. James, $200,000.

INDUSTRIAL BUILDINGS

Additional earlier Construction Reports will be found in the regular section.

BIDS ASKED

Bids Asked August 19

O., Lorain — FACTORY — Printz-Biederman Co., 1974 E. 61 St., Cleveland 1 story, 120x130 ft. brick, steel and concrete factory. $75,000. Christian-Schwartzenberg & Gaele Co., 1836 Euclid, Cleveland, engrs. CD 8/8.

Bids Asked About August 31

Tex., Hereford — GRAIN ELEVATORS — Fraser Milling Co., Hereford, reconstructing 2 grain elevators. $150,000. CD 6/21—ENR 7/4.

Bids Asked

Calif., Los Angeles—WAREHOUSE-FOUNDRY—H. Kramer & Co., 2460 Enterprise St., 2 story, 130-201 ft., steel, concrete warehouse and foundry, 50x104 ft., laboratory and office, two 10,000 gal. oil storage tanks, structural steel to Union Iron & Steel Co., 1600 N. Indiana St. CD 7/2—ENR 7/25.

N. Y., New Rochelle — LABORATORY — Schwarz Laboratories, 202 E. 44 St., New York, Zone 17, chemical laboratory and storage bldg. Wm. Lescaze, 211 E. 48 St., New York, Zone 17, archt.

Tex., Houston—PLANT & WAREHOUSE—Clorox Chemical Co., 850 42 Ave., Oakland, Calif., chemical plant and warehouse. $220,000. CD 4/8—ENR 5/2.

Ont., Niagara Falls—FACTORY—International Silver Co., 263 River Rd., Niagara Falls, N. Mann, 1995 Franklin Ave., archt., 2 story steel, brick factory, about $60,000. CD 5/16/45—ENR 5/24/45.

SOON LETS CONTRACT

Mass., New Bedford—BREWERY—Dawson's Brewery, Inc., 29 Brook St., soon lets contract 1 story, brick, steel bottling plant, brewery addn., Tallman, Labroks & Rousseville, 222 Union St., archts. M. Linenthal, 16 Lincoln St., Boston, engr.

CONTRACTS AWARDED

Calif., Inglewood — FACTORY — Universal Refrigeration Co., 1854 S. Western Ave., Los Angeles, 1 story, concrete, steel, refrigerator mfg. factory, 440 N. Eucalyptus St., own forces. $150,000.

Ill., Chicago — FACTORY — Galvin Mfg. Corp., 4545 W. Augusta Blvd., remodeling 6 story, bsmnt., brick, factory to Ragnar Benson, Inc., 4744 W. Rice Ave. $100,000.

Mass., Holyoke—GARAGE-STATION, etc. —Charles Godere, 509 Canal St., 1 story, 65x120 ft., 40x80 ft., brick, stucco, steel automobile sales station, garage, showroom, Elm St., to Casper-Ranger Constr. Co., 6 Newton St. $55,000. O. C. Vachon, 23 Dillon Ave., archt.

Mass., Worcester—WAREHOUSE-GARAGE —Summer Realty Co., Inc., 25 Westwood Drive, 1 story, 70x130 ft., brick, steel, warehouse and garage, Summer St., to S & R Constr. Co., 63 Orient St., $55,000. CD 7/15—ENR 7/18.

O., Akron—FACTORY—Goodyear Tire & Rubber Co., 1144 E. Market St., 1 story, brick factory, making steel rims, to Clemmer Constr. Co., 134 E. Thornton St. $380,500; structural steel erection to Burger Iron Co., 1324 Firestone Pkwy.

Tex., Arp—STORAGE FACILITIES—Independent Refinery Co., Arp, constructing storage facilities, own forces. $100,000.

Ont., Lindsay — WAREHOUSE — Lindsay Flour & Feed, 76 William St., N., 3 story, concrete block warehouse to P. J. Tully, 19 Peel St., Lindsay. About $55,000.

Ont., Toronto — FACTORY — S. Barber & Sons, 211 Scarlett Rd., 1 story concrete block, steel factory to J. Shaw, 468 St. Johns Rd. About $60,000. C. W. Smith, 602 Jane St., Toronto, archt. CD 7/18.

Ont., Toronto—PLANT—General Merchandise Ltd., 45 Richmond St., W., 2 story brick plant addn. to Stan E. McLacklan, 42 Cheltenham Ave. About $65,000. Barnett & Reider, 870 Millwood Rd., Leaside, archts. CD 5/6.

Ont., Toronto—FACTORY—Toronto Petticoat Co. Ltd., 456 Wellington St., W. factory on University Ave. to Principal Investments, Ltd., 465 Bay St., Toronto. About $150,000.

Que., Disraeli—FACTORY—Federal Hosiery Mills Ltd., Disraeli, factory to La Compagnie de Constr., De Disraeli. $65,000.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

RATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 65 CENTS PER LINE (OR FRACTION) PER INSERTION

COPY RECEIVED UP TO 10:00 A. M. FRIDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS

SEND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK 18, N. Y.

Bids: Aug. 30 (231)

General Construction

Sealed proposals will be received by the Clerk of the Board of Estimate and Contract of The City of Rome, New York, at the Office of the City Clerk, City Hall, until 3:30 P. M. (E.D.T.) Aug. 30, 1946, for the purpose of constructing City Hall Annex and Garage. Separate bids are requested for General Construction, Heating, Plumbing and Electrical Work.

The bids will be publicly opened and read aloud at a meeting of the Board of Estimate and Contract to be held in the Office of the Mayor at 4:00 P.M. (E.D.T.) Aug. 30, 1946.

All proposals to be considered must be accompanied by a certified check of the bidder in the amount of five (5) per centum of the bid. The said check is to be made payable to John W. Hughes, City Treasurer.

After the bids have been opened, the Board of Estimate and Contract will award the contract to the lowest responsible bidder. The City of Rome reserves the right to waive any informalities in, or to reject any or all bids.

The successful bidder will be required to furnish a performance bond in an amount not less than 100 per centum of the bid. The contract documents, including information for bidders, plans and specifications, may be obtained at the Office of the City Engineer, on deposit of Ten Dollars ($10.00). If plans are obtained for more than one class of work, an additional deposit of Five Dollars ($5.00) for each set will be required. These payments will be refunded upon the return of the plans and specifications in good condition within two weeks after date of receiving proposals. The Engineer's estimate is $90,000, using 1939-1940 prices.

Joseph E. Lolo
Clerk of the Board of Estimate and Contract
of The City of Rome, N. Y.
Dated: Rome, N. Y., August 3, 1946.

Bids: Sept. 3 (230)

Constructing a Steel Standpipe

CONTRACT 102

SEALED PROPOSALS addressed to The Board of Contract and Supply of The Metropolitan District and endorsed "PROPOSAL FOR THE CONSTRUCTION OF STEEL STANDPIPE, IN THE TOWN OF NEWINGTON, CONNECTICUT," will be received at the Executive Office of The Metropolitan District, 650 Main Street, Hartford, Connecticut, until 1:15 P.M., Eastern Standard Time (2:15 P.M., Eastern Daylight Saving Time), Tuesday, September 3, 1946, at which time and place they will be publicly opened and read.

Proposals shall be submitted either by messenger, registered mail or Railway Express Agency, Inc.

After the bids are opened and read they will be taken under advisement and the award of the contract, if awarded, will be made as soon thereafter as practicable.

The work to be done consists of the fabrication and erection of a 310,000-gallon steel standpipe, 27¼ feet in diameter and 70 feet high, complete with steel roof and specified appurtenances, and concrete foundation and pipe pit, in Newington on the east side of Old Highway about 300 feet northeast of Mountain Road.

Plans and specifications may be obtained on and after August 19, 1946, at the Office of the Manager and Chief Engineer of The Water Bureau of The Metropolitan District, 1026 Main Street, Hartford, Connecticut, on deposit of five dollars ($5), in cash or certified or cashier's check, made payable to The Water Bureau of The Metropolitan District, which amount will be refunded if both are returned in good order within one month of date of opening of bids. No deposits will be refunded after that time. Specifications used in making a bid will be considered as returned.

Each proposal must be accompanied by a certified or cashier's check for an amount covering not less than ten per cent. (10%) of the total amount bid, made payable to The Metropolitan District, and a satisfactory surety bond, as stated in the Information for Bidders, for the total amount bid will be required of the successful bidder for the faithful performance of the contract.

The right is reserved to accept any bid, whether or not the lowest, or to reject any or all bids as the interest of the District may appear to require.

BOARD OF CONTRACT AND SUPPLY,
By: Richard Dillon, Clerk.
Hartford, Connecticut,
August 2, 1946.

Bids: Sept. 12 (232)

Waterproofing Subway Structures

RE-ADVERTISEMENT FOR BIDS
DATED AUGUST 15, 1946.
CITY OF CHICAGO.
DEARBORN STREET SUBWAY.
CONTRACT W-3.

Sealed bids, endorsed "PROPOSAL FOR WATERPROOFING SUBWAY STRUCTURES, CONTRACT W-3," will be received by the City of Chicago, in the county of Cook and state of Illinois, at the office of the Commissioner of Subways and Superhighways, Room 460, 20 N. Wacker Drive, Chicago 6, Illinois, until 1 o'clock P.M., Central Standard Time (being 2 o'clock P.M., Chicago Daylight Saving Time), on Thursday, September 12, 1946, at which place and time all such proposals will be opened publicly and read aloud by a representative of the Commissioner of Subways and Superhighways.

The work for which such proposals are invited consists of waterproofing subway structures of the Dearborn Street Subway, together with miscellaneous work appurtenant and collateral thereto, as specified in the Contract Documents.

All bids must be made upon blank forms of proposal as furnished by the Commissioner of Subways and Superhighways and included in the Contract Documents, and shall be made in accordance with the provisions contained in said documents.

The Contract Documents, including Standard Specifications for Subway Construction, Contract Requirements and Contract Plans, are on file and available to bidders at the office of the Commissioner of Subways and Superhighways at Room 460, 20 N. Wacker Drive, Chicago 6, Illinois. Copies of the Contract Documents may be obtained by depositing Twenty-five Dollars ($25.00) with the Commissioner of Subways and Superhighways for each set of documents: Provided, however, any prospective bidder who obtained copies of the Contract Documents which were issued prior to December 27, 1945, and who returned certain sets of such documents and received from the City of Chicago the specified refund of Fifteen Dollars ($15.00) for each of such sets of Contract Documents so returned, may obtain the reissued sets of the Contract Documents by depositing Fifteen Dollars ($15.00) for each reissued set, up to the number of sets returned in conformity with the above. The amount of the deposit for one reissued set of such documents will be refunded to each actual bidder who returns the said documents in good condition within ten (10) calendar days after the opening of bids. Fifteen Dollars ($15.00) will be refunded for each of all other sets of reissued documents so returned.

Each proposal must be accompanied by cash or a certified check drawn on some responsible bank doing business in the city of Chicago, in the amount of Five Thousand Dollars ($5,000.00) payable to the order of the City of Chicago. Any proposal submitted without being accompanied by such cash or certified check may be considered informal and consequently may be rejected.

The City of Chicago reserves the right to reject any or all bids and to disregard any informalities in the bids and bidding.

No bid may be withdrawn, after the scheduled closing time for receipt of bids, for at least forty-five (45) calendar days.

CITY OF CHICAGO,
By VIRGIL E. GUNLOCK,
Commissioner of Subways
and Superhighways.
Chicago, Illinois, August 15, 1946.

Bids: Sept. 10 (234)

Completion of Delaware Aqueduct

CONTRACT 388

SEALED BIDS will be received by the Board of Water Supply, at its offices, thirteenth floor, 120 Wall street, New York City, until 10:00 A. M., Eastern Standard Time, on Tuesday, September 10, 1946, for Contract 388, for construction and installations to complete structures at fifteen localities along the portion of the Delaware aqueduct about 67 miles long from Shaft 4 in the Town of Gardiner, Ulster county, to Shafts 1A at Hill View reservoir in the City of Yonkers, Westchester county, New York, all as set forth in the specifications.

The work to be done under this contract includes installing in the shafts, chambers and other structures of the aqueduct, equipment and materials to be furnished by The City; furnishing and installing other equipment and materials in these structures; unwatering the aqueduct tunnels for inspection; removing the temporary doors, windows and window closures from the chamber and other superstructures along the aqueduct and installing the permanent doors and windows; constructing electric transmission lines and concrete roads and completing the grading, seeding and grassing in areas adjacent to a number of the chambers, and performing other work incidental to or in connection with that mentioned above.

No bid will be received and deposited unless accompanied by a certified check upon a National or State bank, drawn and made payable to the order of the Comptroller of The City of New York, in the amount of one hundred thousand dollars ($100,000.00), for the proper execution of the contract.

At the above place and time the bids will be publicly opened and read. Sets of pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, requirements as to surety, etc., can be obtained at the office of the Secretary at the above address, upon application in person or by mail, by depositing the sum of five dollars ($5.00) in cash or its equivalent for each set. Within 30 days following the award of contract or rejection of bids, the full amount of such deposit will be refunded for each set submitted as a bid and a refund of four dollars ($4.00) will be made for each other set returned in acceptable condition. Arrangements will be made whereby prospective bidders desiring blueprints of the contract drawings for their own use may secure same, the cost thereof to be paid by them. For further particulars, apply at the office of the Chief Engineer at the above address.

IRVING V. A. HUIE, President, HENRY HESTERBERG, RUFUS E. McGAHEN, Commissioners, Board of Water Supply; RICHARD H. BURKE, Secretary.

OFFICIAL PROPOSALS

(Continued from page 28)

OFFICIAL PROPOSALS

Bids: Aug. 21 (229)

State Highway Work

STATE DEPARTMENT OF PUBLIC WORKS BUREAU OF CONTRACTS & ACCOUNTS ALBANY, N. Y.

Sealed proposals will be received by Henry A. Cohen, Director, Bureau of Contracts & Accounts 14th Floor, The Governor Alfred E. Smith State Office Building, Albany, N. Y., until Ten-thirty o'clock A.M., advanced standard time, which is nine-thirty o'clock A.M., eastern standard time, on WEDNESDAY, August 21, 1946, for the construction and reconstruction of highway projects in the following counties:

County	Deposit for plans	Bid deposit	Type	Miles	Dept. estimate
CONSTRUCTION					
Greene	$10	$40,000	R. O. B. Gravel Found. Course Conc. Rigid Frame Bridge 2 spans @ 55' 6" each	1.18	$710,000
Nassau	20	30,000	Grad. & Struct. Incl. Elliptical Arch 79' span; Elliptical Arch 74' span; Rigid Frame 82' span Elliptical Arch 76' span	0.50	570,000
CONSTRUCTION AND RECONSTRUCTION					
Jefferson	5	18,000	Conc. 9" thk.; 46' wid. Conc. Widening; Misc. Work	2.11	338,000
RECONSTRUCTION					
Albany and Schenectady	20	95,000	Top Crse. Asph. Conc. Opt.	7.57	1,658,000
Cayuga	5	22,000	Conc. 8" thk. 22'-36'-42' Wid. I-Beam Br. span 52'	3.90	382,000
Clinton	10	14,000	Truss 160' span 3 span 155' IB & 24' span slab Misc. Work 8" Conc. 20' & 22'	0.70	240,000
Nassau	10	40,000	Conc. Widening 9" Thk.	4.66	704,000
*Onondaga	5	18,000	Truss, 240' span with 2 app. I-Beam spans 75' each; Top Crse. Asph. Conc. Opt.	0.68	335,000

*This project involves the use of Alpha Composite Construction which is patented and the royalty is $156.80.

Maps, plans, specifications, and estimates may be obtained at the office of the department of Public Works, Bureau of Contracts & Accounts, Albany, N. Y., and at the office of the District Engineers in whose districts the roads are located. The names and addresses of the District Engineers will be furnished on request and may be seen at the office of the State Department of Public Works, State Office Building, Room 398, Worth & Center Streets New York City.

The deposit for Plans and Proposal Forms for each contract containing 1 to 15 sheets is $5.00; 16 to 30 sheets, $10.00; over 30 sheets, $20.00. A refund will be made in full to bidders for the return of one set, in good condition, within 30 days of award, or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications, and contract agreement, and to the special provisions applying to projects financed with federal funds.

Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of "State of New York, Commissioner of Taxation & Finance" for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders."

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type upon which the proposal is predicated.

Minimum Wage Rate per hour for above work shall be as follows:

County	Skilled Labor	Intermediate Grade Labor	Unskilled Labor

UNLESS SHOWN OTHERWISE IN THE ITEMIZED PROPOSAL FOR EACH PROJECT.

The right is reserved to reject any or all bids.

CHAS. H. SELLS
SUPT. OF PUBLIC WORKS

OFFICIAL PROPOSALS

Bids: September 9 (222

Additions to Filter Plant, Wells, Pumping Equipment and Water Mains to Filter Plant

Sealed bids for enlarging filter plant including additional filters, subsidence basins, mixing chambers with mechanical equipment, addition to chemical house, chemical feed equipment, pumps and miscellaneous additions, also for wells, deep well pumping equipment, mains from wells to filter plant and other additions and changes in present plant of water works system of the City of Fort Lauderdale, Florida will be received by the City Commission at the City Commission Room in the Temporary City Hall, Fort Lauderdale, Florida until 9 o'clock a.m. Eastern Daylight Saving Time on the 9th day of September, 1946 and then at said room publicly opened and read aloud.

The information for Bidders, Form of Bid, Form of Contract, Plans, Specifications, and Performance Bond may be examined at the office of the City Auditor—Clerk, Temporary City Hall, Fort Lauderdale, Florida, and at the office of Keis & Holroyd, 257 Broadway, Troy, New York. Copies thereof may be obtained at the office of Keis & Holroyd, or from the City Auditor-Clerk upon payment of $25.00 for each set. Any bidder upon returning such set promptly and in good condition will be refunded his payment, and any non-bidder upon so returning such set will be refunded $20.00.

The City Commission of the City of Fort Lauderdale, Florida, reserves the right to waive any informalities in or to reject any or all bids.

A certified check made payable to the order of the City of Fort Lauderdale, Florida in the amount of five per centum (5%) of the bid must be deposited by each bidder with his bid as a guarantee that in case the contract is awarded to him, that he will within five (5) days thereafter, execute such contract and furnish a satisfactory performance bond. On failure to do so, he shall forfeit the deposit as liquidated damages, and acceptance of the bid will be contingent upon the fulfillment this requirement by the Bidder.

The successful bidder will be required to furnish a performance bond satisfactory to the City of Fort Lauderdale, Florida, in the amount of the contract, and having as surety thereon, such surety company or companies as are acceptable to the City of Fort Lauderdale, Florida.

The work will be let in separate contracts as follows:

Contract No. 1—General Construction for Additions and Changes at Present Water Treatment Plant.

Contract No. 2—Furnishing and installing piping and equipment for new filters, including sand, gravel, and connections to existing system.

Contract No. 3—Wells, equipment and structures at wells.

Contract No. 4—Mains from Wells to Water Treatment Plant and connections to Existing Mains.

No Bidder may withdraw his bid within 30 days after the date set for the opening thereof. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof.

J. H. Philpott,
CITY MANAGER

Keis & Holroyd,
257 Broadway
Troy, New York
July 29, 1946

OFFICIAL PROPOSALS

Bids: Aug. 29. (233)

State Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ROUTE 25, SECTION 35

Construction of Route 25; Section 35, Lockwood Street Ramp Extension, from Lockwood Street to Raymond Boulevard, City of Newark, Essex County, length 0.083 miles.

Estimated: 500 cu. yds. Roadway Excavation-Earth
3,200 cu. yds. Borrow Excavation
1,600 sq. yds. 10" Rein. Conc. Pavement Surface

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Thursday, August 29, 1946, at ten A.M. EASTERN STANDARD TIME, *(eleven o'clock, DAYLIGHT SAVING TIME)*, and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclose in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

Bids: Sept. 6 (225)

Steel Reservoir

WASHINGTON SUBURBAN SANITARY COMMISSION
CONTRACT NO. 262-W

Sealed proposals for furnishing materials for and erecting a welded steel reservoir for storing water, 10,000,000 gallons capacity, having a height of 20 feet, will be received at the office of the Washington Suburban Sanitary Commission, Hamilton Street, Hyattsville, Maryland, until 11:00 A. M., Friday, September 6, 1946, at which place and time they will be publicly opened and read.

Plans and specifications may be obtained from Harry R. Hall, Chief Engineer of the Commission, Hyattsville, Maryland.

Perry Boswell
Lacy Shaw
Frank B. Smith
Commissioners

OFFICIAL PROPOSALS
(Continued from page 29)

Bids: Aug. 23 (224)

Water Main Construction

WASHINGTON SUBURBAN SANITARY COMMISSION
CONTRACT NO 183-W

Sealed proposals for constructing approximately 15,300 feet of 6-inch to 20-inch cast iron water mains on Contract No. 183-W, will be received at the office of the Washington Suburban Sanitary Commission, Hamilton Street, Hyattsville, Maryland, until 11:00 A. M., Eastern Standard Time, Friday, August 23, 1946, at which place and time they will be publicly opened and read.

Plans and specifications may be obtained from Harry R. Hall Chief Engineer of the Commission, Hyattsville, Maryland, upon deposit of $5.00, which deposit will be returned to bidders or to those returning plans and specifications in good condition.

Perry Boswell
Lacy Shaw
Frank B. Smith
Commissioners

U. S. Government

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., July 22, 1946. Sealed bids (Specifications No. 1447) will be received at the office of the Bureau of Reclamation, Altus, Oklahoma, until 10 a.m., August 22, 1946, and then publicly opened, for furnishing labor and materials and performing all work for the *construction of earthwork and structures, station 0+00 to* station 778+22.1, Ozark Canal, Altus Project, Oklahoma. The work is situated in the vicinity of Altus, Oklahoma. The principal items of work and the estimated quantities involved are as follows: 250,000 cubic yards of excavation for canal; 300,000 station cubic yards of overhaul; Compacting 28,000 cubic yards of embankments; 6,000 cubic yards of excavation for drainage channels and dikes; 31,200 cubic yards of excavation for structures; 23,000 cubic yards of backfill; Compacting 11,800 cubic yards of backfill; 2,100 square yards of dry-rock paving; 3,350 cubic yards of concrete in structures; Furnishing and handling 5,000 barrels of portland cement; Placing 422,000 pounds of reinforcement bars; Placing 430 square feet of elastic filler in joints; Placing 960 linear feet of rubber water stops in joints; Placing 11,000 pounds of metal water stops in joints; Erecting 73 M feet b.m., of timber in structures; Laying 356 linear feet of 24-inch diameter concrete pipe; Laying 64 linear feet of 30-inch diameter concrete pipe; Installing 10,000 pounds of gates; and Installing 3,000 pounds of miscellaneous metalwork. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. The work shall be commenced within thirty (30) calendar days after date of receipt of notice to proceed and shall be completed within three hundred (300) calendar days from the date of receipt of such notice. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid: *Provided*, That guarantee in excess of $2,000,000 will not be required. Where the total amount payable by the terms of the contract is not more than $1,000,000, a performance bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $1,000,000 and not more than $5,000,000, the performance bond shall be in the sum of 40 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $5,000,000 and not more than $10,000,000, the performance bond shall be in the sum of 30 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $10,000,000 and not more than $25,000,000, the performance bond shall be in the sum of 20 percent of the total amount payable by the terms of the contract. Where the total amount payable by the terms of the contract is more than $25,000,000, the performance bond shall be in the sum of $5,000,000. Whenever the total amount payable by the terms of the contract shall be more than $2,000 but not more than $1,000,000, the payment bond shall be in the sum of one-half of the total amount payable by the terms of the contract. Whenever the total amount payable by the terms of the contract shall be more than $1,000,000 and not more than $5,000,000, the payment bond shall be in the sum of 40 percent of the total amount payable by the terms of the contract. Whenever the total amount payable by the terms of the contract shall be more than $5,000,000 the payment bond shall be in the sum of $2,500,000. Liquidated damages for delay will be one hundred dollars ($100) per day. Partial payments will be made monthly. (See Article 16 of the contract.) No charge to prospective bidders for copies of the specifications and drawings; to others $2.25 per copy, not returnable. For particulars, address the Bureau of Reclamation, Altus, Oklahoma; Denver 2, Colorado; or Washington 25, D. C. (235)

MICHAEL W. STRAUS.
Commissioner

for
DIRECT CONTACT
with the
MOST ACTIVE BUYERS
throughout the field of
ENGINEERING
CONSTRUCTION—
Use the
Searchlight Section
ENGINEERING NEWS-RECORD

U. S. Government

FEDERAL WORKS AGENCY
Bureau of Community Facilities
Washington 25, D. C.

Sealed proposals will be received by Rufe B. Newman, Jr., Deputy Commissioner for Construction, Bureau of Community Facilities, Federal Works Agency, Room 2143 Federal Works Building, Washington, D. C., until 2:00 o'clock P. M. Eastern Standard Time, on August 27, 1946, for the construction of the following work at Charlotte Amalie, St. Thomas and Christiansted and Frederiksted, St. Croix, Virgin Islands, comprising approximately the following quantities:

PROJECT NO. 2, SANITATION AND FIRE PROTECTION FACILITIES, CHARLOTTE AMALIE, ST. THOMAS

Remove 13,000 Lin. ft. 4" to 8" existing C. I. pipe
Install 67,000 Lin. ft. 2½" to 10" C. I. pipe
110 Fire hydrants
134 Gate-valves 2½" to 10"
3 Pumps—350 to 750 gpm and main line meters and appurtenances
1 New pumping station
Two 200,000 gal. reinforced concrete storage reservoirs
35,000 Lin. ft. sanitary sewers and laterals
335 Manholes
3,000 Cu. yds. rock excavation
50 Public toilets with necessary appurtenances

PROJECT NO. 3, INTERCEPTING SEWER, CHARLOTTE AMALIE, ST. THOMAS

6,000 Lin. ft. interceptor and outfall sewers
1,200 Lin. ft. submerged C. I. sewer
Sewage pumping station
Dual drive sewage pumping equipment
35 Manholes with necessary appurtenances

PROJECT NO. 19, SANITATION AND FIRE PROTECTION FACILITIES, CHRISTIANSTED, ST. CROIX

Remove 550 Lin. ft. 6" C. I. salt water pipe
Install 15,300 Lin. ft. 2½" to 10" C. I. pipe and appurtenances
34 Fire hydrants
34" Gate-valves 2" to 8"
1—750 Gpm and 1—500 gpm salt water pump
Salt water pumping station
300,000 gallon concrete salt water reservoir
17,000 Lin. ft. 6" to 12" V. C. sewer pipe 0'-16' cut
1,600 Lin. ft. 6" to 8" C. I. pressure pipe
130 Manholes
Sewage pumping stations and equipment
Cut and replace 11,000 lin. ft. pavement

FREDERIKSTED, ST. CROIX

Remove 2,775 lin. ft. 3" to 6" C. I. pipe
Install 12,000 lin. ft. 2½" to 10" C. I. pipe and appurtenances
16 Fire hydrants and 29 gate-valves 2" to 8"
1—500 gpm salt water pump
Alterations to existing salt water pump station
14,400 Lin. ft. 6" to 12" V. C. sewer pipe 0'-12' cut
63 Manholes
Sewage pumping station and equipment
Cut and replace 6,200 lin. ft. pavement

At which time and place the proposals will be publicly opened and read aloud. Bids received after closing time of bid opening will be returned unopened.

Plans and specifications and other proposed contract documents are open for public inspection at the District Engineer's Office, Old Marine Barracks, Charlotte Amalie, Virgin Islands; the District Engineer's Office, 501 Banco Popular Building, San Juan, Puerto Rico; Public Works Office, Christiansted, St. Croix, Virgin Islands, and Room 2143 Federal Works Building, Washington, D. C.

A set of such documents may be procured from R. L. Kenan and Associates, Consulting Engineers, Bell Building, Montgomery, Alabama, upon deposit of $50.00, all of which will be refunded to bona fide bidders upon the return of plans, in good condition, within seven days from date of bid opening.

To parties who procure plans and specifications upon payment of $50.00 and who do not submit a bid, $40.00 will be refunded *provided same are returned within seven days from date of bid opening.* No refund will be made for return after this time.

Each proposal must be accompanied by a bid security in an amount of not less than 5 per cent of the total bid.

The successful bidder will be required to furnish a performance bond in an amount equal to 100 per cent of the contract price, such bond to cover full performance of the contract and payment for labor and materials.

No proposal may be withdrawn after the scheduled closing time for receipt of bids for at least 30 days.

The Government reserves the right to reject any and all proposals and to waive informalities with respect thereto.

GEORGE H. FIELD
Commissioner
(158)

Official Proposals Columns of

ENGINEERING NEWS-RECORD

are MUST reading, each week for contractors, engineering-construction companies, equipment and materials manufacturers, all over the United States . . . and used regularly for over 50 years by government, state, county and municipal departments to advertise bids.

Official Proposal Division

Engineering News-Record
330 West 42nd St.
New York 18, N. Y.

EMPLOYMENT OPPORTUNITIES

RATE: 15 CENTS A WORD, MINIMUM CHARGE $3.00

Positions Wanted (full or part time individual salaried employment only), ½ the above rates, payable in advance.

Box Numbers in care of any of our New York, Chicago or San Francisco offices count 10 words additional in undisplayed ads.

Discount of 10% if one payment is made in advance for four consecutive insertions of undisplayed ads (not including proposals.)

Copy for new advertisements received until 10 A. M. Friday for following Thursday's issue

POSITIONS VACANT

CHIEF ACCOUNTANT: experienced on Government Cost-Plus a Fixed-Fee contactors—wanted by Contractor for War Department CPFF Contract in Virginia. P-719, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT FOR complete charge of alteration and repair of high class residential work. Must understand all types of construction and be able to estimate cost, order material and supervise work. Requires thorough experience and good appearance. Permanent position in high class residential community. Central New Jersey. P-739, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

INSPECTOR AND Assistant structural engineer to handle field inspection and assist with the design of a number of locks and dams for the control of tidal water. Work will be performed with a minimum of supervision working from plans, specifications, verbal instructions and rough free hand sketches depending on whether field or office work is being done. In reply give age, education, experience, references, martial status, salary desired, snapshot photograph, sample of drafting and other data available. Reasonably permanent, normal chance for advancement and vacation with pay. John C. Stephens, Water Control Engineer, 1306 Court House, Miami 32, Florida.

GRADING SUPERINTENDENT or Foreman for highway and heavy grading projects in Indiana and Michigan. Permanent position for capable man. State experience, salary and reference. P-770, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

ENGINEER-ESTIMATOR—Experienced dock-building, waterfront structures. P-769, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

DESIGN AND DRAFTING ENGINEERS

Positions open with South Dakota Highway Commission Plans Department.

Experienced men with ability in drafting, Final Plans preparation and Right-of-Way maps wanted.

Positions permanent for well qualified men.

Write South Dakota Highway Commission, Pierre, South Dakota, giving experience and salary desired, first letter.

WANTED

DRAFTSMEN

Mechanical Draftsmen, experienced on Power Plants, Process Piping, and General Mechanical Design. Steady employment in well-established Cleveland Consulting Engineers Office, with heavy backlog of work. Monthly salary, vacations, sick leave. One year contract to qualified men, after trial period. Give full particulars, educational background, and job history in first letter.

J. GORDON TURNBULL, INC.

2430 Chester Ave Cleveland 14, Ohio

CONCRETE PAVING Superintendent or Foreman for highway projects in Indiana and Michigan. Permanent position for capable man. State experience, salary, and references. P-771, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

WANTED—ENGINEERS experienced in the design of sewers, sewage treatment plants and water treatment plants. State qualifications, experience and salary requirements. P-787, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

DESIGNER, ESTIMATOR, and draftsman—Shop fabricating structural and ornamental iron work, located in Norfolk, Va. Experience required at least 10 years with shop doing similar work. Permanent job to right man. Give full particulars in first letter. P-788, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

EXPERIENCED ESTIMATOR wanted, preferably with college engineering training. Must be familiar with industrial and commercial building construction and materials. Excellent and permanent position. Location, Western Maryland. Furnish references, age and experience with inquiry. P-801, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

DRAFTSMAN: FIRST Class man for piping layout work; estimating and field experience desirable. P. O. Box 2240, Norfolk, Va.

SUPERINTENDENTS
CONSTRUCTION
ENGINEERS
ESTIMATORS
FIELD ACCOUNTANTS

Large Nationally known Construction Company, doing work throughout the country, has openings for men experienced in heavy industrial construction.

Good pay and long term employment for qualified persons. With the exception of Estimators, must be willing to travel.

Reply, giving full details as to past experiences, education, references, date of availability and starting salary requirement.

P-738, Engineering News-Record
520 North Michigan Ave., Chicago 11, Ill.

ENGINEER, FOR general construction contractor, skilled in preparing quantity take-offs from plans, drafting, calculating and surveying. P. O. Box 2240, Norfolk, Va.

LARGE MUNICIPAL Corporation in the Maryland suburbs of Washington, D. C., wants senior and junior computers on survey work. Good salaries, permanent positions, retirement feature. State salary desired, experience and qualifications in first letter. Address to Harry R. Hall, Chief Engineer, Washington Suburban Sanitary Commission, Hyattsville, Maryland.

NEW ENGLAND College invites applications for two positions in Mechanical Engineering Department. (1) Machine Design and shop practice, (2) general engineering and laboratory. Instructor or assistant professor. Good living conditions. Salary $2200 to 2700. P-806, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL STEEL Draftsman for work with small fabricating shop in Florida. Prefer man who has had experience detailing for welded construction. Give references and experience in first letter. P-807, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL STEEL and reinforced concrete design engineers. Permanent jobs in reliable Pittsburgh engineering and contracting firm. Reply stating education, experience, age, salary and when available. P-808, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

MECHANICAL ENGINEER: Graduate, about 35 years old to handle engineering design. Experienced—crane and shovels—permanent, good working conditions. Location, western Ohio. State experience and salary expected. P-809, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

(Additional Employment Opportunities on page 32)

WANTED

Carpenter Foreman and Carpenter

for Bridge and Culvert Work on Highway Job.

R. E. TOMPKINS

8 Exchange St. Rochester 4, New York

OFFICE ENGINEERS

Structural Design Engineers thoroughly experienced in the design of structural steel, reinforced concrete and foundations, for industrial buildings and structures.

Office Engineers with experience designing roads, drainage, sewers, property location and descriptions and related drafting.

These are permanent positions immediately available and offer excellent opportunities with large chemical company in Texas . . . Salary commensurate with training and experience. Give complete details of past experience, education, society memberships or licenses now held. Application by letter or conference.

ADDRESS:

Personnel Director

THE DOW CHEMICAL COMPANY

FREEPORT, TEXAS

EMPLOYMENT OPPORTUNITIES

POSITIONS VACANT

ELECTRICAL ESTIMATOR: by a nationally known electrical contracting firm. Experience on large industrial developments and purchasing. Permanent position and excellent opportunity for right man. Give references, experience, salary desired and when available. P-810, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL DESIGNERS and draftsmen for bridge and grade separation work. Must be civil engineer with experience in structural drafting. Application should state education, experience, age and references and should include sample of your drafting. P-811, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CHIEF OF Party for property and engineering surveys; office computer for property surveys and general Civil Engineering work; and tracer, with some experience in laying out work. Will consider girl for latter work. Office located in north eastern New Jersey. Apply P-812, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WANTED: YOUNG graduate civil engineer for railroad engineering in field and office. Location—New York State. Permanent. Give references, experience, and salary desired. P-813, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL DESIGNERS: and draftsmen for bridge and grade separation work. Must be graduate Civil Engineer with experience in structural drafting. Applications should state education, experience, age and reference, and should include sample of your drafting. P-814, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

STRUCTURAL DESIGNER: Consulting engineer's office. Experience with design of New York City buildings necessary. P-815, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER on roads, grading and drainage, heavy excavation, foundations. Must know how to take off quantities from plans. Estimate costs. New York City contracting firm. P-816, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PIPING DRAFTSMAN Wanted by midtown New York consulting engineer. Must be experienced in low and moderate pressure work. Good opportunity. Write P-829 or phone Murray Hill 5-5355 giving education experience and salary desired.

POSITIONS WANTED

OFFICE MANAGER: Field, age 37, 15 years experience, full charge of field office. General contractors, cost plus and contract work. Present income $6,000, base plus. PW-733, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

BITUMINOUS SUPERINTENDENT: Age 37, seven years technical and practical experience on al ltypes of bituminous highway construction. Desire position with contractor or oil company. PW-687, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

PROJECT MANAGER Available September 1st foreign or domestic work. Capable organizing, equipping and operating all tynes and phases of construction enterprise. Highest references. PW-742 Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER, 26: Graduated 1942 with High Honors in Engineering. 39 months Army Engineers. Overseas construction. Some drafting and material expediting. Desire work with designer, consultant or contractors in New England or upstate N. Y. Field work preferred. Sub-professional work not considered. Job must pay well and be permanent. PW-774, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION: FORMER Contractor, 20 years sewer, concrete, tunnel experience. Wishes to connect with growing concern as partner or manager. PW-767, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ENGINEER: EXECUTIVE, 25 years in building construction, negotiating general and sub-contracts, purchasing materials and equipment. Available Sept. 15th. PW-822, 330 W. 42nd St., New York 18, N. Y.

POSITIONS WANTED

CIVIL ENGINEER, Age 34, available 1 September 1946 for permanent connection in Southern or Southwestern State. Eight years varied experience in highway field surveys, design estimating, drafting and Public Works Officer on Navy Airport. Excellent references. PW-764, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL ENGINEER: 6 years design experience industrial buildings and bridges steel and concrete. Location immaterial. PW-579, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

COMPTROLLER OR Chief Cost Accountant, age 42, salary $7,200—available September 1st. PW-790, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

MECHANICAL ENGINEER: Age 30, married, Peruvian nationality, McGill graduate. Three years experience in mechanical and boiler design with leading Canadian firms. Good references. Desires position with progressive company in Peru. Passports in good order. PW-791, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER, 37, former Commander, CEC, now employed responsible position large general contractor, desires change to consulting engineering Varied experience, bridge, sanitary and building construction, good background structural theory, Naval experience largely airfield development. Can meet and deal successfully with prospective clients. PW-794, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER. College graduate national registration. 27 years experience all types consruction, 10 years design, 11 years field, 6 years complete charge large design office structural, mechanical, electrical. Permanent position wanted with contractor or architect. PW-802, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PROJECT MANAGER: 23 years administrative and engineering experience. Registered engineer. Degrees: C.E. and M.E. Former Officer, Corps of Engineers. PW-817, Engineering News Record, 520 N. Michigan Ave., Chicago 11, Ill.

CIVIL SANITARY Engineer: Teacher, Associate member A.S.C.E. Age 45, single, education: B.S. in C. E., C.E., M.C.E., M.S. in Ph.E. Registered. Twenty years experience in engineering, construction, business, and teaching. PW-818, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

SUPERINTENDENT: If it is a difficult job, mean, wet and hard to frame, and comes under the heading of heavy construction. Bridges, dams, disposal plants, water front improvements; concrete structures, heavy excavation, etc. My 25 years experience will be an asset to you, also have following of key men who are familiar with this class of construction. Available after Aug. 20th. Location immaterial. PW-819, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

GRADUATE CIVIL Engineer, 28, married. Four years exceptionally varied construction engineering; two years with C.E. Corps U. S. Navy. Can do executive or general construction engineering. Desire position that requires a capable and energetic man offering a future with a general contractor or engineering firm. Available immediately. L. T. Marshall, Box 55, Minneola, New York.

REGISTERED PROFESSIONAL Engineer: Bachelor of Science in electrical engineering; veteran of World War II; public utility, valuation and taxation experience; age 31. Seeking engineering or engineering management position. PW-820, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

GRADUATE CIVIL Engineer: age 25, former naval officer. 3 years experience; including 2 years aircraft layout and design, development and testing, and 1 year engineering surveys and reports. Employed, desires engineering position offering opportunity for advancement. PW-821, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION SUPERINTENDENT: Age 35, desires steady position with small const. co. Have considerable experience as supt. on tunnels, open cuts, coffer-dams, disposal plants, water lines, sewer work and conduit jobs. Can estimate work. Will go anywhere. PW-827, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

POSITIONS WANTED

ELECTRICAL ENGINEER: Now employed desires change. Over twenty years experience with power company, engineers and contractors. Single, free to travel. Foreign duty acceptable. Best of references. O.K. to contact present employer. PW-823, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION SUPERINTENDENT: 25 years experience all types heavy and building construction in New York, New Jersey, Pennsylvania, Florida and Cuba. Competent at estimating and bidding. References. Available Sept. 1st. PW-824, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ENGINEER: C.E., P. E. 28 years structural design. Industrial plants, RR shops, power plants, oil refineries. 8 years charge of design. Desires permanent position of responsibility. PW-825, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

REGISTERED ARCHITECT and structural engineer, 15 years experience on commercial, industrial, public buildings, and oil tank farms. Desires position with possibility of association or foreign work with American concern. PW-826, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PART TIME WORK WANTED

STRUCTURAL DESIGNER: 25 years experience, industrial and commercial buildings, steel and reinforced concrete; superstructures and foundations. Seeks part time work, designing, checking, details, estimates. PTWW-828, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

FREE BULLETIN

"SURPLUS PROPERTY"—How-What-Where: A 32 page 5x8 indexed booklet giving complete information on the purchase of government surplus in all available classifications. Write the Office of Information—War Assets Administration, Washington 25, D. C.

To EMPLOYERS who advertise for MEN:

THE letters you receive in answer to your advertisements are submitted by the applicants with the hope of securing the position offered.

Frequently when there are many applicants, the only letters acknowledged are those of the most promising candidates. Others may not even receive the slightest indication that their letters have been received, much less considered. These men often become discouraged, will not respond to future advertisements, and sometimes even question their bona fide character.

Every advertisement printed in the searchlight section is duly authorized.

It will help to keep readers interested in this advertising if you will make it a practice to acknowledge every application received, even if you merely return the letters of unsuccessful applicants marked, "Position filled, thank you." If you don't care to reveal your identity, you might mail them in plain envelopes.

This suggestion is made in a spirit of friendly co-operation between employers and the men replying to Positions Vacant advertisements.

Classified Advertising Division

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